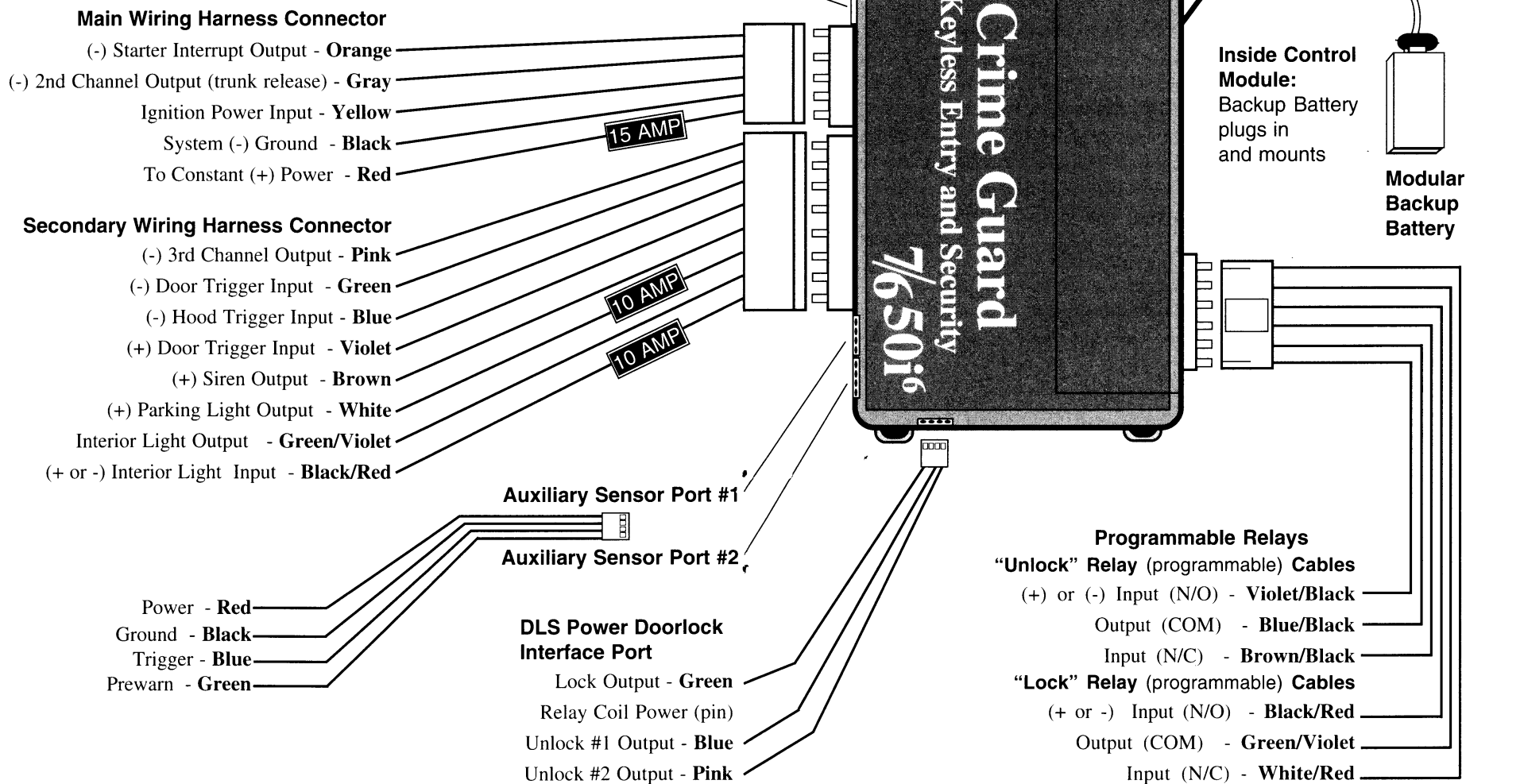


Wiring Diagram Overview

The Crime Guard 750i⁶ is a 2-way security system, which includes a 1-way transmitter and a 2-way controller. The 650i⁶ is a 1-way system, including two transmitters. The 650i⁶ may be upgraded to 2-way operation by an optional Omega Echo kit.



Crime Guard

Keyless Entry and Security

INSTALLATION INSTRUCTIONS



**Data Port For Omega's Intellikit
Interface Modules**

**Onboard Doorlock Relays Are
Programmable For Maximum
Flexibility**

**4th And 5th Auxiliary
Channel Capability**

61052 / 61059

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The Crime Guard 650i⁶'s transmitters and the 750i⁶'s 1-way transmitter and 2-way controller are pre-programmed at the factory to operate the system. If adding or replacing transmitters or controllers, **please see the Operation Guide booklet for Transmitter and Controller programming.**

Omega Disclaims Any Responsibility or Liability In Connection With Installation.

- IMPORTANT -

Please carefully read these instructions before starting the installation of the Crime Guard security system. The numerous wiring connections required, and the options offered by several of the programmable features makes pre-planning the installation critical.

More complete instructions for programming transmitters and features may be found in the Operation Manual.

Installation Considerations

Before Starting The Installation: This entire booklet should be read before starting the installation. An understanding of which control module wires are to be used and their functions is essential. Installations will vary from car to car, as some control module wire connections are required, while others are optional. Before starting the installation, it should be determined which control module wires will be used. Most installers will list these wires, then "map out" the installation by locating and noting the target wires in the vehicle. This will also determine the best location for the control module, which is mounted upon completion of the installation and testing of the system.

Some of the wiring connections, such as power, ignition and starter interrupt, are best made at the ignition switch harness, located around the steering column area.

CAUTION! Avoid the Airbag circuit! Especially avoid any harness or wires encased in Yellow or Red tubing or sleeves. Do not use a standard test light, as it can deploy an airbag or damage on-board computers and sensors if the wrong circuits are probed. A Digital Multimeter (DMM) should be used.

Other typical connection points may be behind the dash or in the kick panel areas, for parking and/or interior lights, trigger circuits and power doorlocks. Soldering or proper use of crimping terminals for all wiring connections are recommended.

Mounting The Control Module: The Control Module contains the necessary electronics required for the system's operation. Always mount this module in the vehicle's interior compartment, in a secure location that is not easily accessible. Ensure that moisture, vibration and temperature extremes are minimized. Acceptable locations include mounting behind the dash, behind the glovebox or other interior panels.

Mounting The Electronic Siren: The electronic “2-n-1 Psycho Siren” must be mounted external to the vehicle, but not accessible or vulnerable to tampering. The engine compartment typically offers the best mounting location opportunities. See page 9 for specific mounting and connection details.

The **Status Light** and **Valet Switch** are in two forms:

- contained within the 2-way transceiver unit, as with the 750i⁶;
- and as separate items, which can be mounted independently or in a combination holder, as with the 650i⁶.

The separate Status Light and Valet Switch may be used with the 750i⁶ as optional parts, and the transceiver unit hidden, if desired; and similarly the 650i⁶ may be upgraded to 2-way operation, which adds the transceiver to the system. It is important to understand this flexible compatibility, both ways, between the two security systems, and with the two forms of Status Light and Valet Switch.

Transceiver- Using the transceiver-mounted items requires no special installation considerations; this places the Status Light in a good position to be seen, both inside and outside of the vehicle, and the Valet Switch at a convenient location to the user. The user may customize the switch presses required to perform an Emergency Override with Programmable Feature #1 (the factory setting is the most convenient “1 press”).

The transceiver unit may be mounted directly to an interior glass by utilizing the attached adhesive pad (clean and prepare the glass before adhering). The best operating range performance is obtained by mounting the transceiver placed as high as possible in the vehicle, with the smaller rod-like end pointed upwards. Avoid mounting this unit close to metal parts or structure of the vehicle.

Separate- In the case of the 650i⁶, or as optional parts for the 750i⁶, the separate Status Light and Valet Switch may be custom-mounted inside the vehicle by drilling a 9/32” hole in a suitable interior panel; be sure to carefully ensure that the area behind the location has an unobstructed depth of at least 1/2”. Then route the wiring harness through the hole to the control module, and snap the light in place. Mount the valet switch, using its adhesive pad, in a hidden location which is accessible to the operator; carefully route the wires to the control module.

Or, use the combination holder for the Status Light and Valet Switch. Mount the assembly in a location where it can easily be seen by the driver, and preferably where it can be seen from outside. Two mounting methods are provided: double-

sided adhesive tape, and two screws. If using the adhesive tape, properly prepare the mounting surfaces to ensure good adhesion. If using the screws for a more permanent mounting, carefully separate the housing halves, install the screws (avoid overtightening), then snap the assembly halves back together. Carefully route the wiring harness to the control module to avoid any chances of it being chafed or pinched.

Power Doorlock Options: The unique flexibility of the 750i⁶ and 650i⁶ is also found in multiple options for interfacing the vehicle power doorlocks.

Internal Relays- Both models feature internal relays, which are programmable for several different functions. The default settings are “lock” and “unlock”, with optional operations consisting of parking light, horn, or two additional remote channels, as latching or on demand. Relays are not always needed for doorlock connection, and the following two options offer further flexibility that the internal relays can be available for optional functions.

DLS Port- The second option is the traditional “DLS” port, which can accept all Omega analog doorlocking accessories (dual, triple relay sockets, or the modular clip-on add-on relay packs) and direct-wire basic 3-wire Negative pulse doorlocking systems. All Omega doorlocking data bus module accessories can be driven by either this port, and the DLS port offers two unlocking outputs, so that driver’s door priority unlocking can be configured.

Data Port for IntelliKit Modules & Bypasses: Omega IntelliKit data bus interface modules and bypass kits simply plug into this port. These data-to-data (D2D) accessory products save time, and in many cases offer the only acceptable interface means for many newer vehicle’s doorlocking system and/or for the OEM-antitheft bypass when adding an alarm or an optional accessory remote start module with the Crime Guard. Omega offers the industries most comprehensive line of these products (go to www.caralarm.com for latest application guide), and each includes its own vehicle-specific instructions.

Backup Battery: Both models have backup battery capability. Included are the 9 volt battery, the wiring harness and slide-on clip mounting bracket. If the system loses vehicle power it will revert to operating with basic security functions, if the backup battery is installed.

Dual Auxiliary Sensor Ports: Both models also feature two auxiliary sensor ports. The included impact sensor plugs into one port, and the second allows the easy addition of a further optional sensor. Each of the ports is dual-zoned: the first zone will respond by chirping the siren only; and the second zone will fully trigger the system, and both have identical layout and operation. The included glass breakage and dual-zone impact sensor is packaged with its own instruction sheet, as are all of the optional Omega sensors which can be further added.

Wiring Connections

- NOTE -

The following sections detail connections for each wire, of each system's wiring harnesses. Always insure that the Black ground wire is grounded, and that the secondary wiring harness is plugged in, before connecting power circuits to the control module. The best installation procedure is to make all connections, and only then plug the individual wiring harnesses into the system control module.

Main Wiring Harness (5-Wire Connector)

Black Wire - (Ground): The Black wire provides Negative ground for the system; proper connection of this wire is very important.

CONNECTION: Using the correctly sized crimp-on ring terminal, connect the Black wire to the metal frame of the vehicle, preferably using an existing machine-threaded fastener. Make sure that the ring terminal attached to the Black wire has contact with bright, clean metal. If necessary, scrape any paint, rust or grease away from the connection point until the metal is bright and clean. If the control module has an insufficient ground connection, the security system can find partial ground through the wires that are connected to other circuits, and function, but not correctly. As the system can partially operate, a bad ground wire connection would not likely be suspected, and in many cases a poor ground is difficult to diagnose.

Red Wire - (Constant Power Input): The Red wire's function is to supply Constant Positive 12 Volts for security system's operation. When 12 Volts is first applied to the Red wire, the system will revert to the state in which it was in when power was taken away. If the vehicle to be serviced, especially if it involves the battery, the system should be placed in Valet Mode. This will prevent the system from being activated if the battery is disconnected and reconnected. The Red wire also supplies 12 Volt Positive to the module's internal relay for flashing the parking lights.

CONNECTION: Connect the Red wire to a Constant Positive 12 Volt source. This source should have Positive 12 Volts with at least a 15 Amp capacity at all times and in all ignition key positions. Connection locations can be at the supply wire at

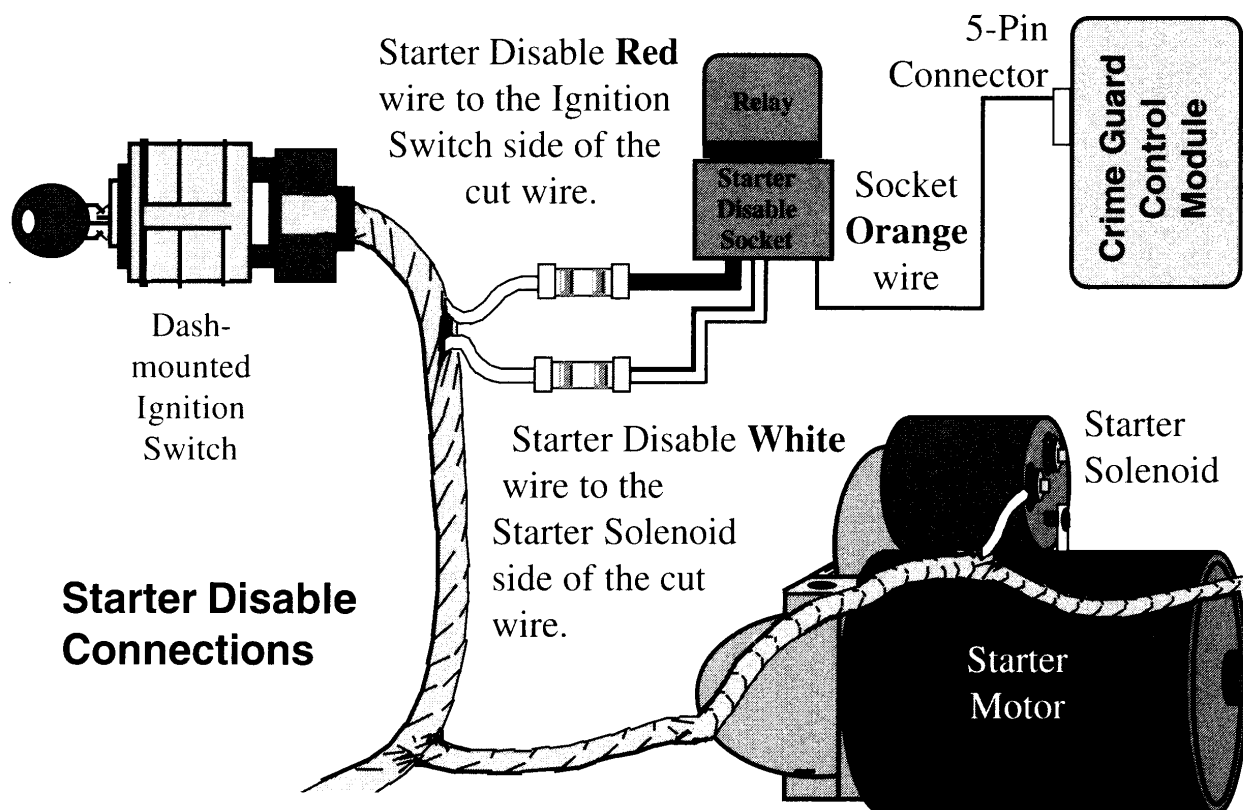
the ignition switch, the supply wire *behind* the fuse block or the fuse/junction block. *Never* just insert the Red wire or any other security system wire behind a fuse. Also, please note that connecting directly to the battery's Positive terminal will expose this connection to failure due to a corrosive environment unless the connection has a protective coating.

Yellow Wire - (Ignition Input): The Yellow wire is an ignition "on" input to the security system. This connection is critical to the proper operation of many of the security system's features.

CONNECTION: This wire supplies Positive 12 Volts to the control module whenever the ignition switch is "on". This connection should be made at the ignition switch harness, to the primary ignition circuit. Primary ignition has 0 Volts when the ignition key is in the "Lock", "Off" and "Accessory" positions; and Positive 12 Volts in the "Run" and "Start" positions. Locate the correct wire at the ignition switch harness and securely splice the Yellow wire to it.

Orange Wire - (Negative Output While Armed); Includes the thick Red & White Wires attached to the relay socket - (Starter Interrupt): The Orange wire is a starter interrupt output, which is active when the security system is in an armed state; the relay that it is attached to the Orange wire prevents the starter from engaging, if a starting attempt is made while the system is armed.

CONNECTION: The typical starter interrupt is shown here-



The starter wire must be located and cut. Cutting the vehicle's starter wire will result in two sides- the "ignition switch" side and the "starter solenoid" side. It is recommended that this connection be done as close to the ignition switch as possible. Use a Digital Multimeter (DMM) to find the correct wire.

CAUTION! Avoid the Airbag circuit! Especially avoid any harness or wires encased in Yellow or Red tubing or sleeves. Do not use a standard test light, as it can deploy an airbag or damage on-board computers and sensors if the wrong circuits are probed. A Digital Multimeter (DMM) should be used.

The starter wire will read Positive 12 Volts only when ignition key is in "start" position (cranking the engine). Cut this wire at a suitable location. Confirm that this is the correct wire by turning the ignition switch to the "start" position; the starter should not engage.

Connect the starter disable socket's Red wire to the ignition switch side. Connect the starter disable socket's White wire to the starter solenoid side. Be sure that good, solid electrical connections are made.

Gray Wire - (2nd Channel or Negative Trunk Release Output): The Gray wire is an optional output operated by the controller/transmitter "II" button; typically the primary use is for trunk release.

CONNECTION: If the vehicle's existing trunk release switch operates as switching Negative to activate trunk release, and draws 250mA or less, the Gray wire may connected directly to the vehicle's switch output wire. If the target wire is Positive switching, and/or draws more than 250mA, an optional relay must be used. To configure a relay to the Gray wire, connect it to relay pin (85), and connect Constant Positive 12 Volts to relay pin (86). Connect pin (30) to power, or ground, as needed. Pin (87) is then connected to the vehicle's trunk wire.

Secondary Wiring Harness (8-Wire Connector)

Brown Wire - (Positive Siren Output): The Brown wire is a 1 Amp Positive output designed to operate the electronic siren for audible confirmations, and to sound if the alarm is triggered.

SIREN CONNECTION: The Brown wire may be connected directly to the siren's Red wire, and the siren's Black wire is connected to (-) Ground.

SIREN MOUNTING: Find a location in the engine compartment away from the extreme heat of the engine and manifold. A suitable location will offer a firm mounting surface, will also allow sound dispersion out of the engine compartment, and not be accessible to a thief. The siren must be pointed downward to avoid moisture getting inside it and to enhance sound dispersal.

SIREN CHIRPS: The siren itself can be set for loud or less loud confirmation chirps- cut the short Black wire loop on the siren for louder confirmation chirps. The confirmation chirps volume may also be adjusted to four different volume levels by User Programmable Feature #10. User Programmable Feature #9 turns the chirps off completely, or it can also set the system to only chirps in valet mode, or to chirp except when the system is in valet mode.

HORN CONNECTION: Both Crime Guard models can sound the vehicle's existing horn in addition to, or in place of, the electronic siren. Sounding the horn is accomplished by one of the programmable relays; see pages 14-16.

White Wire - (Positive Flashing Light Output): This is a Positive 12 Volt output to flash the vehicle's parking lights for visual arming confirmation, to illuminate them for disarming confirmation, to confirm remote starting, and to attract attention while the system is activated.

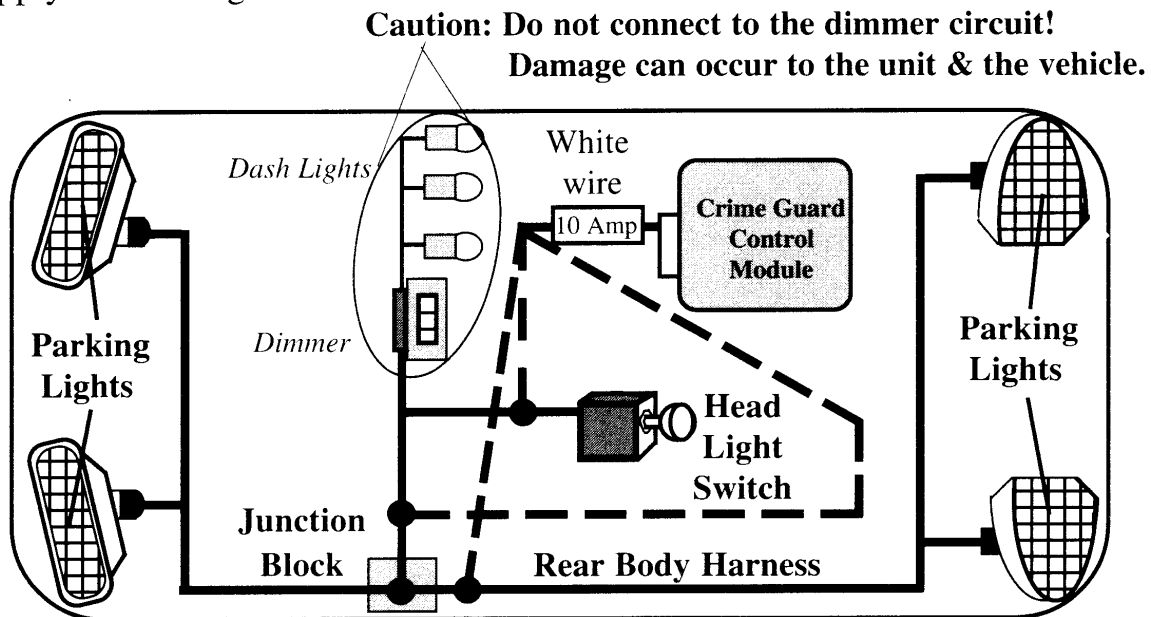
CONNECTION: Connect this wire to the vehicle's Positive 12 Volt parking light circuit, which can usually be found at the following locations: at the headlight switch, at the fuse/junction block, or in the rear body harness in the driver kick panel. Some vehicles have a parking light relay which is triggered by a Negative Ground circuit from the headlight switch; for these vehicles, simply find the Positive output side of the stock relay for a direct connection; or, use the internal programmable relay for "parking light", wire the relay Negative (page 16), and a direct connection to the vehicle's Negative parking light wire may be made (in this case the White wire would not be used).

The correct wire will show Positive 12 Volts when the headlight switch is in the "Parking Light" and "Head Light" positions. When such a wire is located, also test

to ensure that it is non-rheostated: meter the wire operate the dash light dimmer control; the correct wire will show no voltage change when the dimmer is operated.

Do not connect the White wire to a rheostated (dimmer) circuit! This will backfeed the parking lights through the rheostat or illumination control module, and possibly cause damage to the vehicle or security system control unit. Flashing the headlights is not recommended.

Another cautionary note is that the halogen headlights found in modern vehicles are not designed to be rapidly turned on and off, and if connected to the security system, a reduction of their useful life may occur. If flashing the headlights is still desired, a relay must be used, since the headlight's current draw exceeds the 10 amp rating of the built-in relay. If flashing headlights and parking lights are desired, use two relays - configure one relay to supply the parking lights and the other relay to supply the headlights.



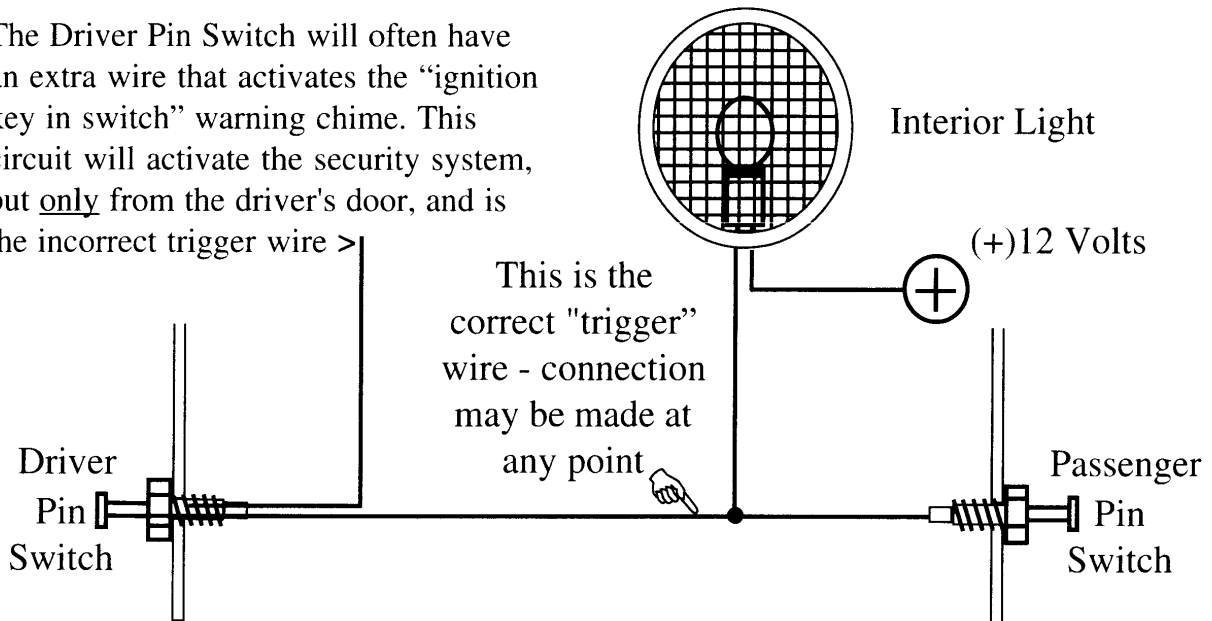
Recommended Connection Points For The White Wire

OTHER PARKING LIGHT CONNECTIONS: Both Crime Guard models can use one of the programmable relays in conjunction with the White wire to flash both sides of dual-parking light vehicles. And as described on the previous page, the programmable relay can be configured and wired to operate a Negative parking light circuit. See pages 14-16 for programmable relay options.

Green Wire - (Negative Door Trigger): The Green wire is an "open door" input to the control module for vehicles having *Negative switching* door pin switches. This wire is most commonly connected to the vehicle interior light system.

Typical Negative Switching Interior Light System

The Driver Pin Switch will often have an extra wire that activates the "ignition key in switch" warning chime. This circuit will activate the security system, but only from the driver's door, and is the incorrect trigger wire >

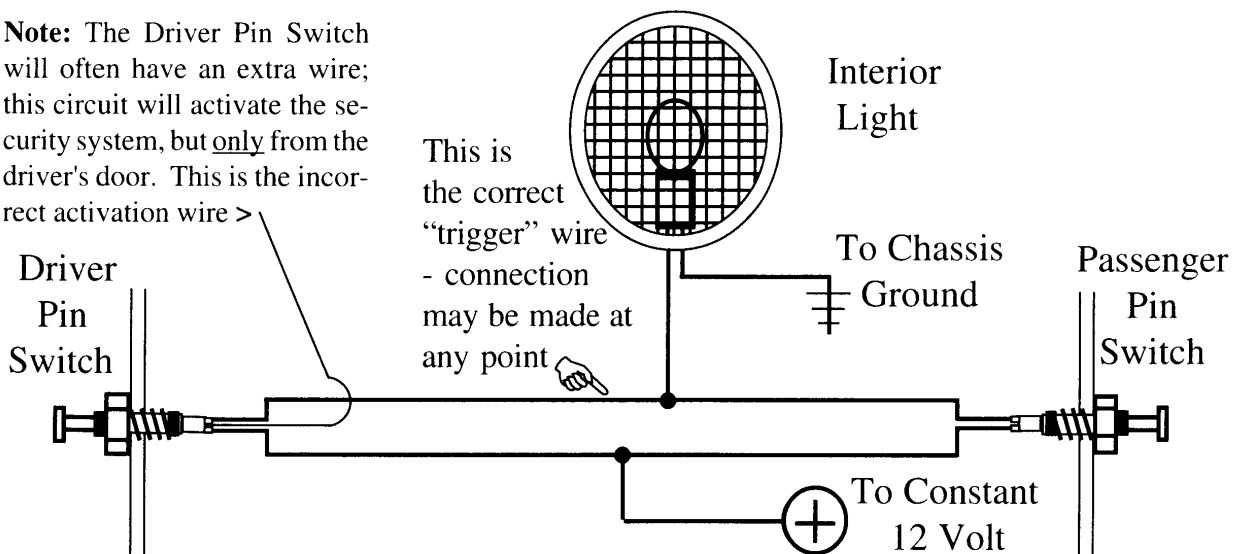


CONNECTION: Connect the Green wire to a wire in the vehicle that is common to all the door pin switches; the correct wire in this type of interior or dome light/door jamb pin switch system will have no voltage present and will also show chassis ground when the doors are opened, and up to 12 volts when the doors are closed.

Violet Wire - (Positive Door Trigger): The Violet wire is identical to the Green Door Trigger wire, with the sole exception that it is an open door input to the control module for vehicles having *Positive 12 volt* door pin switches.

Typical Positive Switching Interior Light System

Note: The Driver Pin Switch will often have an extra wire; this circuit will activate the security system, but only from the driver's door. This is the incorrect activation wire >



The correct wire for a Positive switching type of dome light/door jamb pin switch system will have 12 volts present when the doors are opened, and chassis ground when the doors are closed.

CONNECTION: Connect the Violet wire to a wire in the vehicle that is common to all the door pin switches; the correct wire for this type of dome light/door jamb pin switch system will have 12 volts present when the doors are opened, and chassis ground when the doors are closed.

Notes and Tips, both types of Interior Light or Door Trigger

circuits: The correct wire will show this change when any of the doors are opened. If the vehicle has delay-off or “fade away” interior lights, remember to take this into account when testing the wire. If the pin switch is mounted in the metal structure of the vehicle, and the interior lighting goes out when the switch is removed, suspect a grounding switch-type lighting system.

Switches controlling interior lighting may be found in several locations- the front or rear door jamb area, as the traditional “pin switch” or sliding switch; or as switches inside the doors, either connected to the exterior door handles or to the latching mechanism. A vehicle which has the interior lights illuminating when the outside door handle is lifted is an example of this type of switching system.

Also be aware of vehicles which diode-isolate each door. Typically, this is usually encountered with dash displays that indicate individual doors being ajar. The proper wire to connect to in this type of system is the common wire which is routed directly to an interior light that illuminates when any door is opened.

Green/Violet - (Domelight Supervision Output) & Black/Red - (Domelight Supervision Input) Wires:

Domelight Supervision offers an additional safety and security feature- upon disarming the system the interior lights will turn on to illuminate the interior. The Green/Violet wire is the output to turn on the lights, and the Black/Red wire is input, connected to Positive or Negative polarity which is needed for operating the interior light.

CONNECTION GREEN/VIOLET: The proper vehicle wire to connect the Green/Violet wire to, the dome light activation wire, is common to all the door pin switches. The correct wire will change polarity as the doors are opened and closed. **The dome light activation wire in the vehicle is typically the same wire that the Green or Violet wire is connected to, for the door trigger.**

For reference, see the diagrams on the previous page 11 showing the basic differences between Negative and Positive interior light circuits.

If the vehicle uses a Negative switching interior light system, the activation wire will have no voltage present and show chassis ground when the doors are opened, and up to 12 volts when the doors are closed. The correct wire for a Positive switching type of interior light/door jamb pin switch system will have 12 volts present when the doors are opened, and chassis ground when the doors are closed. The correct wire will show these changes when any of the doors are opened. If the vehicle has delay dome lights, remember to take this into account when testing.

CONNECTION BLACK/RED: The polarity of the dome light supervision output must be selected by the connection of the Black/Red wire as Positive or Negative. Connection of the Green/Violet should have determined which polarity the vehicle uses to operate the dome light; this is either "Negative switching" or "Positive switching" (see the diagrams on page 11). Once "Positive switching" or "Negative switching" has been determined, connect the Black/Red wire to Negative (for "Negative switching" interior lights) or to Positive (for "Positive switching" interior lights).

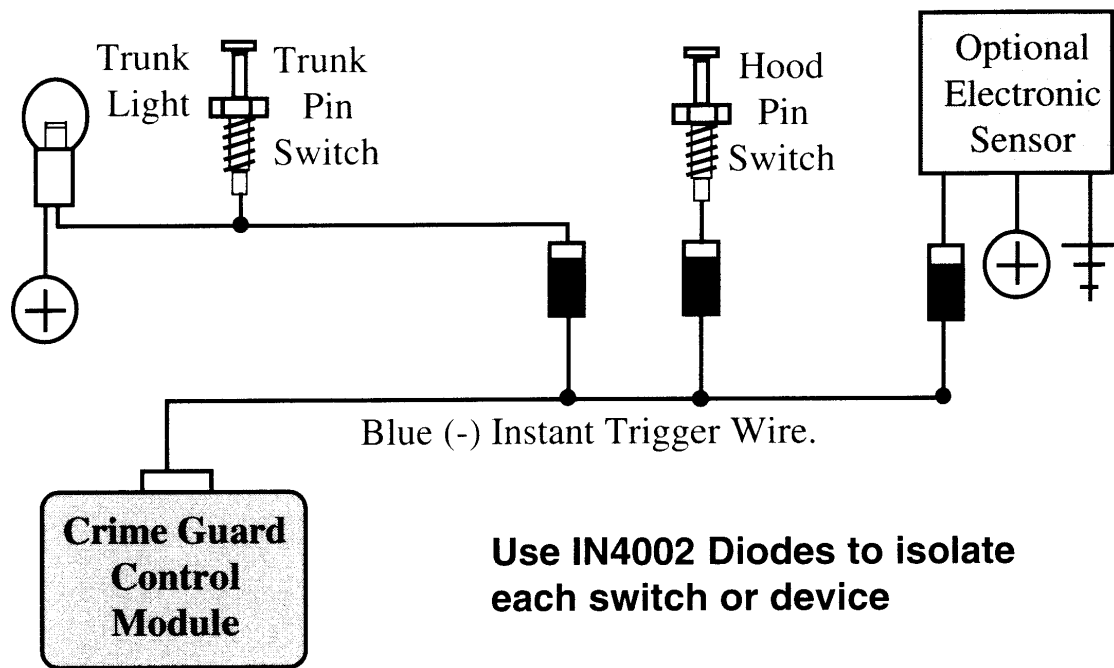
Blue Wire - (Negative Instant Trigger): The Blue wire is a Negative instant trigger used to detect entry into the hood or trunk area of a vehicle.

CONNECTION: The included pin switches may be installed to provide this trigger circuit; or, if there are existing switches the Blue wire may be connected directly, provided this is a negative ground switching circuit (examples: an OEM antitheft hood switch, or in the case of the trunk or hatch a light in the luggage compartment or a "Trunk Ajar" light in the dash).

An indication of such a circuit is the wire having no voltage present when the hood or trunk is open, and up to 12 volts when the hood or trunk is closed. This wire may be used with a mercury type of tilt switch, by itself, but it cannot be used with existing hood or trunk lights which have an internal mercury switch. If the vehicle is equipped with a usable trunk or hood circuit, locate the proper wire and splice the Blue wire directly to the vehicle's wire. If not, then you can install a pin or mercury switch and carefully adjust and test it.

Multiple use of the Blue wire: When wiring more than one of the vehicle's circuits and/or additional circuits to this wire, diode-isolation is usually required to maintain each circuit's proper independent operation. An example would be wiring a hood pin switch and trunk light switch together. Without isolating, the trunk light will turn illuminate whenever the hood is raised. Also, diode-isolation is necessary when combining electronic sensors together, or when adding a sensor in the same circuit as the pin switches.

Diode-Isolating Multiple Negative Instant Triggers



Pink Wire - (Negative 3rd Channel or Option Output): The 3rd Channel Pink wire is an optional output similar to the 2nd Channel Gray trunk or hatch release wire; however, this output is not capable of disarming the system when it is used and therefore has no audible or visual confirmation.

CONNECTION: For most applications an optional relay will be needed; typical connection is the Pink wire to relay pin #85, and connect Constant Positive 12 Volts to relay pin #86. Connect pin #30 to power, or ground, as needed. Pin #87 is the output, and connected to the target wire.

Auxiliary Wiring Harness - Programmable Internal Relays (6-Wire Connector)

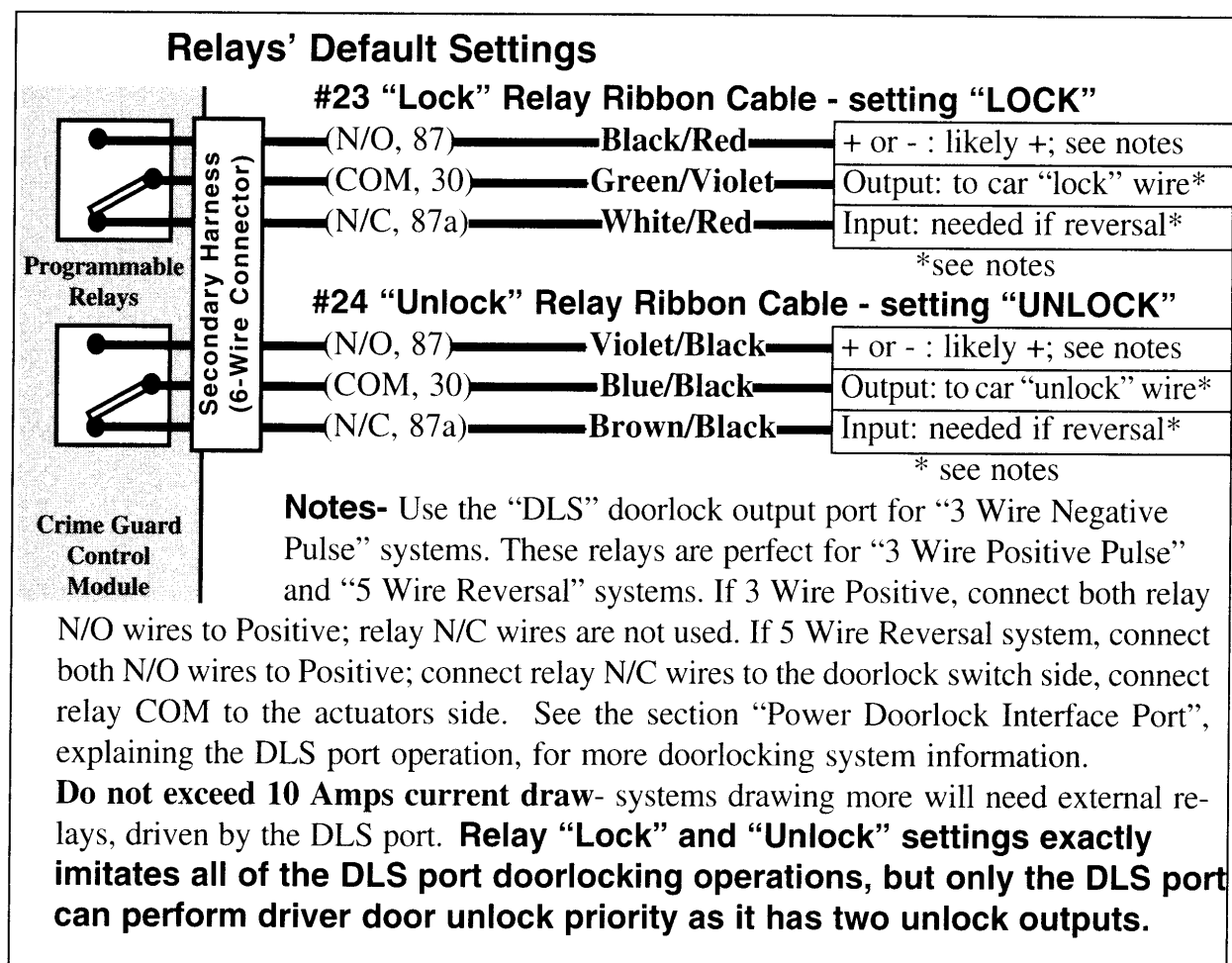
A unique feature of Crime Guard 750i⁶ and the 650i⁶ is two built-in *single pole, double throw* (SPDT) relays, which are programmable for several types of operation. These relays which offer the installer great installation flexibility. Each relay is externally wired with a *normally-closed* load input wire (N/C or “87a”); a *common* load output wire (COM or “30”); and a *normally open* (N/O or “87”) wire which switches to the COM wire when the relay is activated. These program

mable relay wires are an additional secondary harness, in the form of a 6-wire connector; each of the relays' 3 wires are a generous length of joined ribbon wire, for ease of installation. The default setting, and functions of the programmable relays are Door Lock and Unlock. Other functions are available, via the Programmable features #23 and #24, as shown here:

Programmable Feature	Default	1st option	2nd option	3rd option
#23 Lock Relay Functions	Lock (L)	Parking Light (U)	Ch 4 Latch (2)	Ch 4 On Demand (3)
#24 Unlock Relay Functions	Unlock (L)	Horn Med. (U)	Ch 5 Latch (2)	Ch 5 On Demand (3)

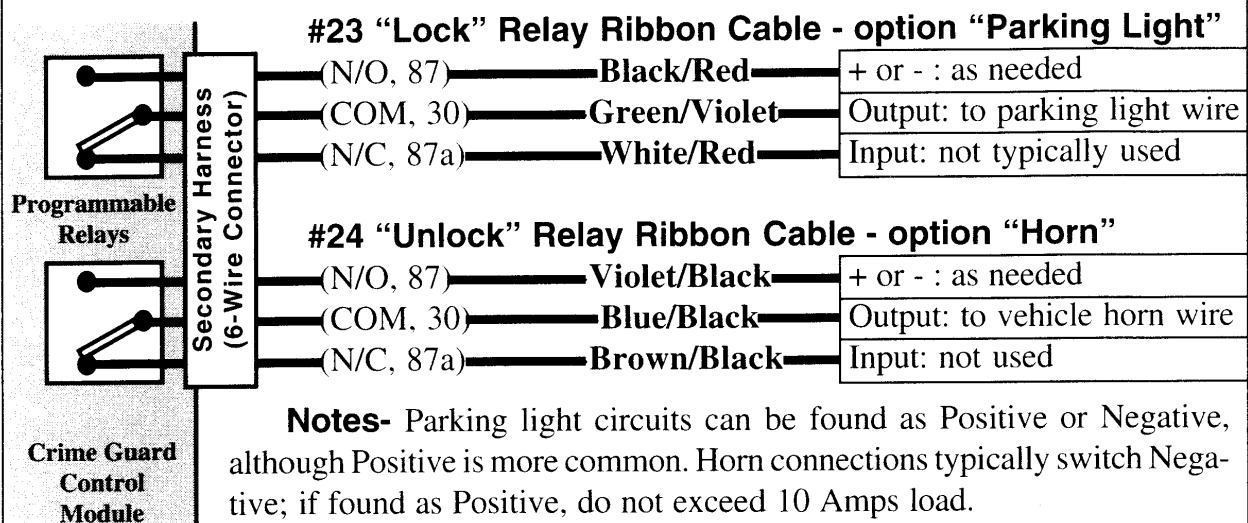
The features may be programmed by turning the ignition on, off, then pressing the Valet Switch **5** times (producing a steady Status Light), and then pressing the Valet Switch 23 or 24 times more to select either feature. Settings are then changed by pressing the controller/transmitter buttons as indicated above after each option.

CONNECTIONS: Using the Programmable Relays The defaulted and optional uses of these relays are described in the following diagrams.



FEATURES #23 and #24 ARE INDEPENDENTLY programmable - the installer may set each feature as desired or needed.

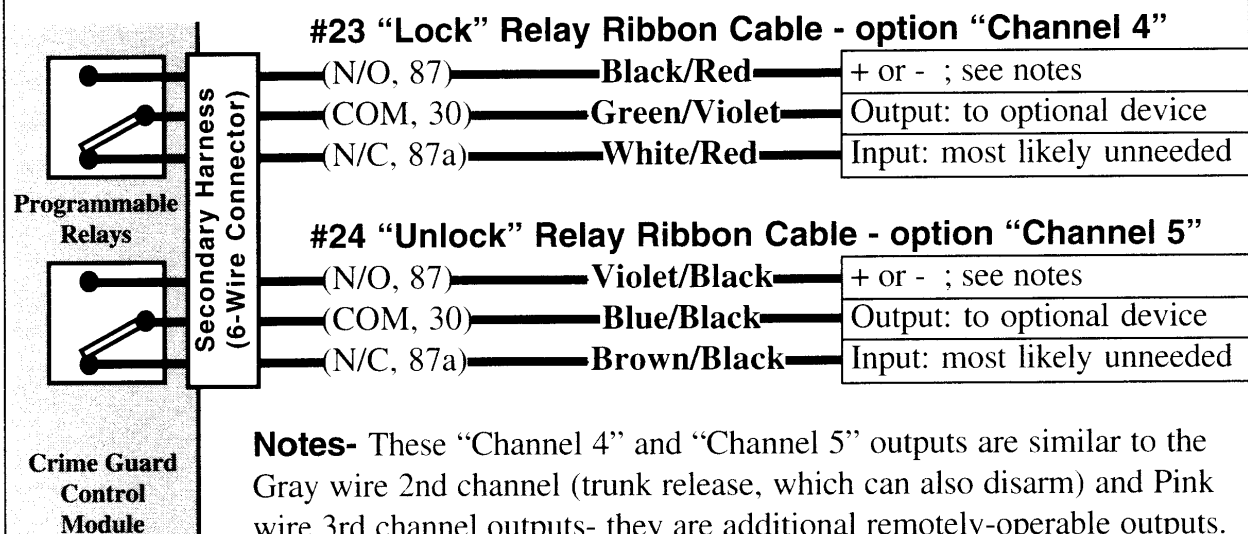
Relays' 1st Optional Settings



"Parking Light" setting operates same as the White wire. "Horn" setting operates the same as the siren, except as pulsed output instead of steady.

FEATURES #23 and #24 ARE INDEPENDENTLY programmable - the installer may set each feature as desired or needed.

Relays' 2nd and 3rd Optional Settings



Operation: When either relay is programmed to operate as remote outputs, pressing the controller/transmitter buttons **"arm/lock (A)"** and **"II"** (2) together operates Channel 4; and pressing the **"disarm/unlock (U)"** and **"III"** (3) buttons together operates Channel 5 (Feature #21 can reassign the buttons). **"On Demand"** operation has the output (either channel 4 or channel 5) occur only while the controller/transmitter buttons are being pressed; **"Latch"** toggles the output- one press of the two buttons turns on the output, and another press of the buttons turns it off. **Use caution, or rather common sense, when configuring either output for the Latch setting**, as each relay draws 65mA when activated. Leaving a relay in the activated condition for an extended period of time would create an unacceptable current draw, or battery drain, on the vehicle.

Accessory Wiring Harness - DLS Port (Red 4-Pin Connector)

The Crime Guard 650i⁵ and 750i⁵ both have great installation flexibility when interfacing it to the vehicle's power doorlocking system.

On both models the internal programmable relays may be used in their defaulted settings as doorlock relays.

This Red DLS port can be directly connected to 3 Wire Negative doorlocking systems, or optional interfaces such as the DLS and 2 relays, DLR-C, DLR-U or others will be needed for other types of power doorlocking systems. Omega also offers other specialty doorlocking interfaces; all include their own detailed instructions.

This section describes the Red DLS port, and doorlock connections with the included harness and optional interfaces.

Plug-In DLS Power Doorlock Interface Port: The Red 4 pin port on the system's control module produces a negative pulse output for locking the doors, a constant 12 volt pin *for the optional relay coils only*, a first negative pulse output for driver door unlock, and a second negative pulse output for unlocking all other doors.

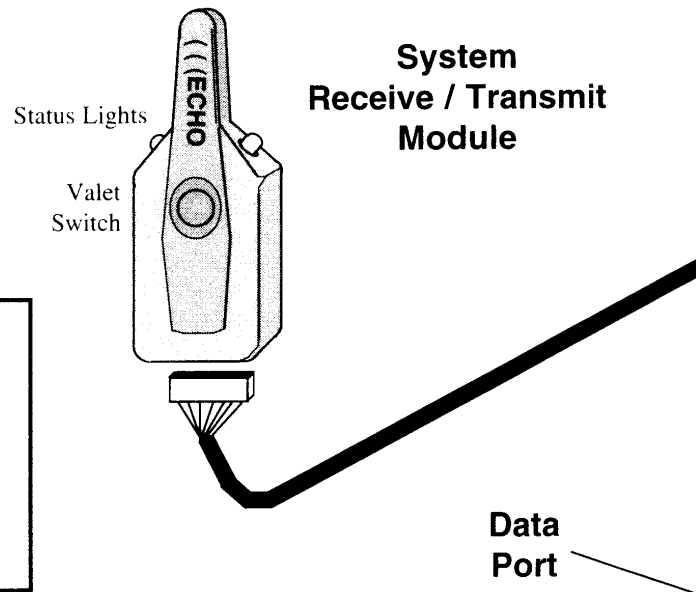
The vast majority of power doorlocks are found as three system types: 3 wire negative pulse, 3 wire positive pulse and 5 wire reversal, rest at ground. Other power doorlock systems which may be encountered are the vacuum pump types found in older Mercedes vehicles and the single wire, dual-voltage which has appeared in some late model vehicles. The best way to identify a doorlock system is to examine the doorlock switch's wiring.

3 Wire Negative Pulse Systems are typically indicated by the presence of three wires at the switch. Of these, one will show constant ground, regardless of whether the switch is being operated or not (at rest); one will show ground when the switch is pushed to the "lock" position, and the other wire will show ground when the switch is pushed to the "unlock" position. With the switch at rest, these two wires will read voltage, usually 12 volt positive but in some cases less. The wires from the switches operate doorlock relays or a doorlock control unit with built-in relays; make the connections between the switches and the relays.

CONNECTION: The included harness (DLP-N4) can allow direct connection between the security system and a 3-Wire Negative Pulse system. If more than the 500mA Ground output that the security module can provide is required, use the optional model DLS and two relays. When driver's door unlock priority is desired, use the optional DLS-3.

Wiring Diagram Overview

The Crime Guard 750i⁶ is a 2-way security system, which includes a 1-way transmitter and a 2-way controller. The 650i⁶ is a 1-way system, including two transmitters. The 650i⁶ may be upgraded to 2-way operation by an optional Omega Echo kit.

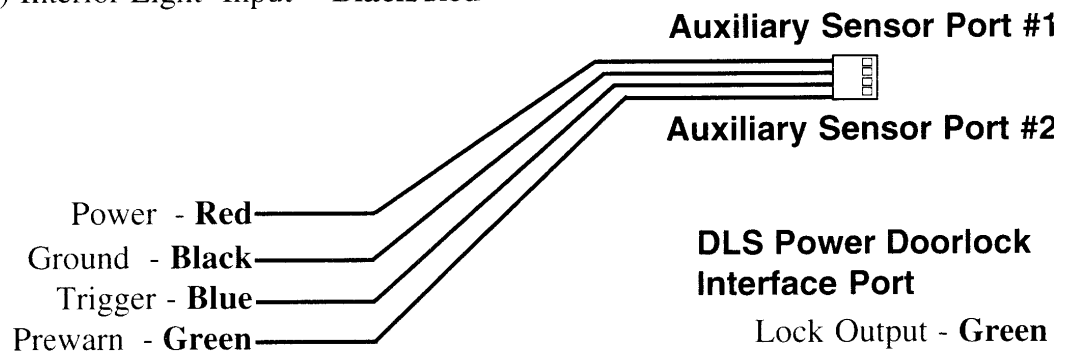


Main Wiring Harness Connector

- (-) Starter Interrupt Output - **Orange**
- (-) 2nd Channel Output (trunk release) - **Gray**
- Ignition Power Input - **Yellow**
- System (-) Ground - **Black**
- To Constant (+) Power - **Red**

Secondary Wiring Harness Connector

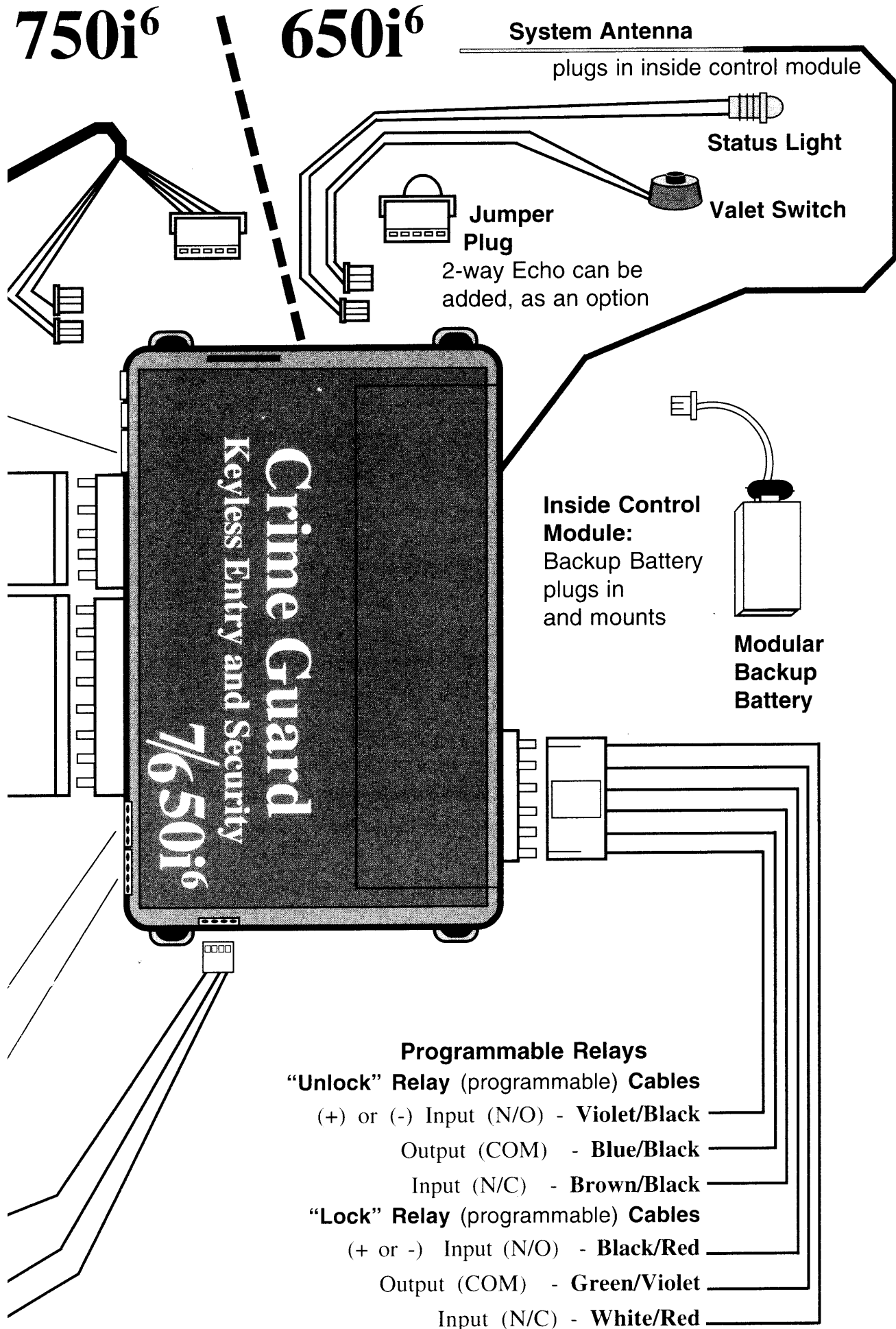
- (-) 3rd Channel Output - **Pink**
- (-) Door Trigger Input - **Green**
- (-) Hood Trigger Input - **Blue**
- (+) Door Trigger Input - **Violet**
- (+) Siren Output - **Brown**
- (+) Parking Light Output - **White**
- Interior Light Output - **Green/Violet**
- (+ or -) Interior Light Input - **Black/Red**



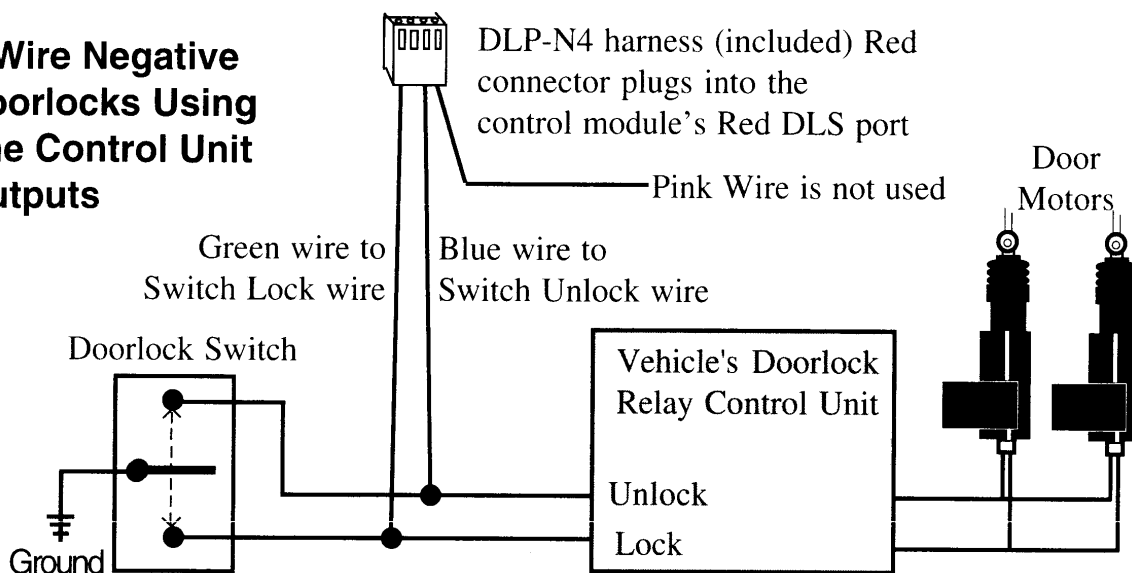
- Lock Output - **Green**
- Relay Coil Power (pin)
- Unlock #1 Output - **Blue**
- Unlock #2 Output - **Pink**

750i⁶

650i⁶



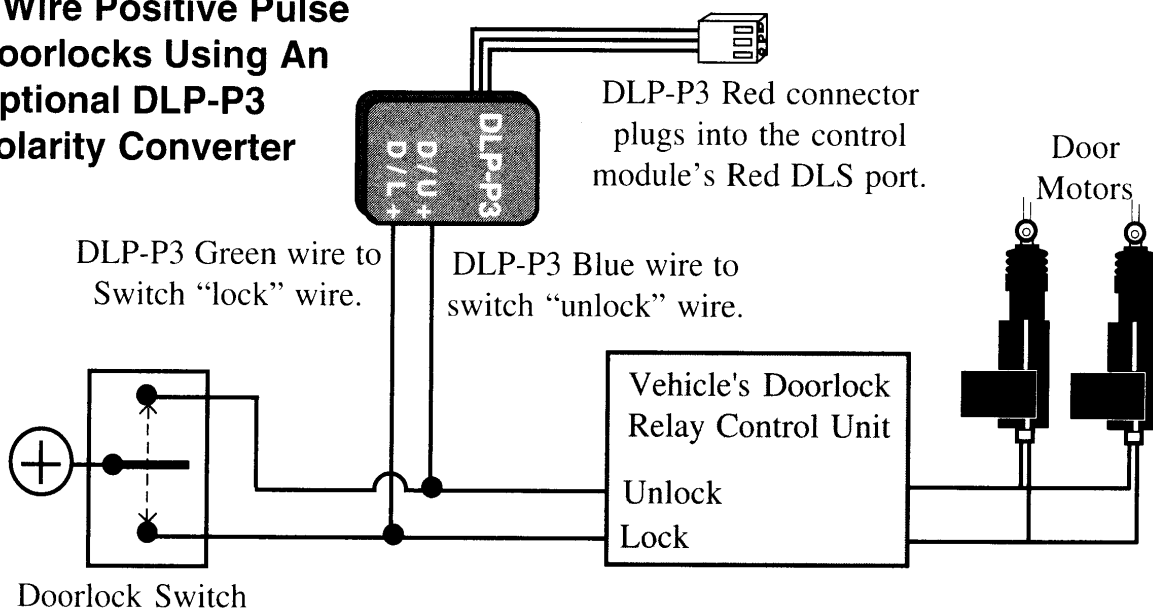
3 Wire Negative Doorlocks Using The Control Unit Outputs

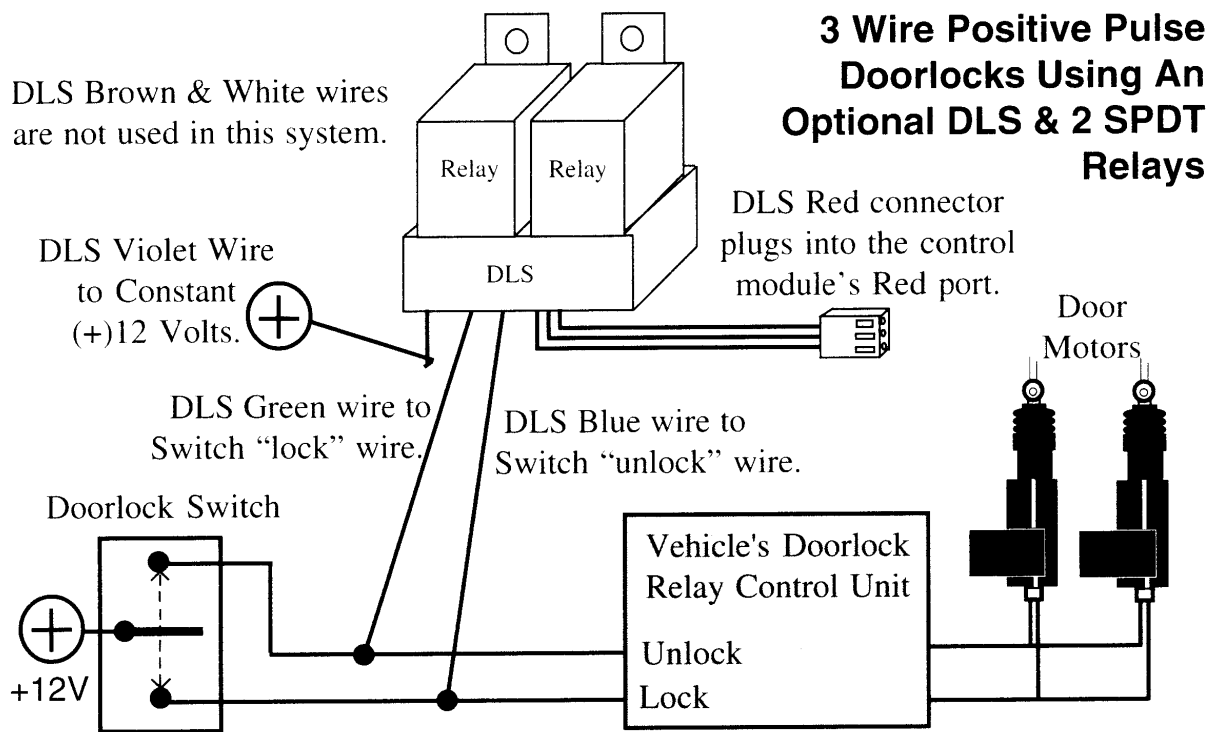


3 Wire Positive Pulse Systems are very similar to the Three Wire Negative Pulse system except the vehicle's doorlock switches use 12 volt positive pulses to operate the vehicle's doorlock relays or control unit. Examine the three wires on the back of the switch; **if more than three, suspect a 5 Wire Reversal system**. One will be constant 12 volt positive, regardless of the switch's position. Of the two remaining wires, one will show Positive when the switch is pushed to "lock", and the other will show Positive when the switch is pushed to "unlock".

CONNECTION: Several options are available for connecting to 3 Wire Positive Pulse doorlocking systems- the DLP-P3 polarity reversal interface, the DLS and two relays or DLS-C, and the internal programmable relays (see pages 18 & 19). If driver's door unlock priority is desired, use the optional DLS-3. The following diagrams show how to connect either of the optional DLP-P3 or the DLS and 2 relay interfaces.

3 Wire Positive Pulse Doorlocks Using An Optional DLP-P3 Polarity Converter





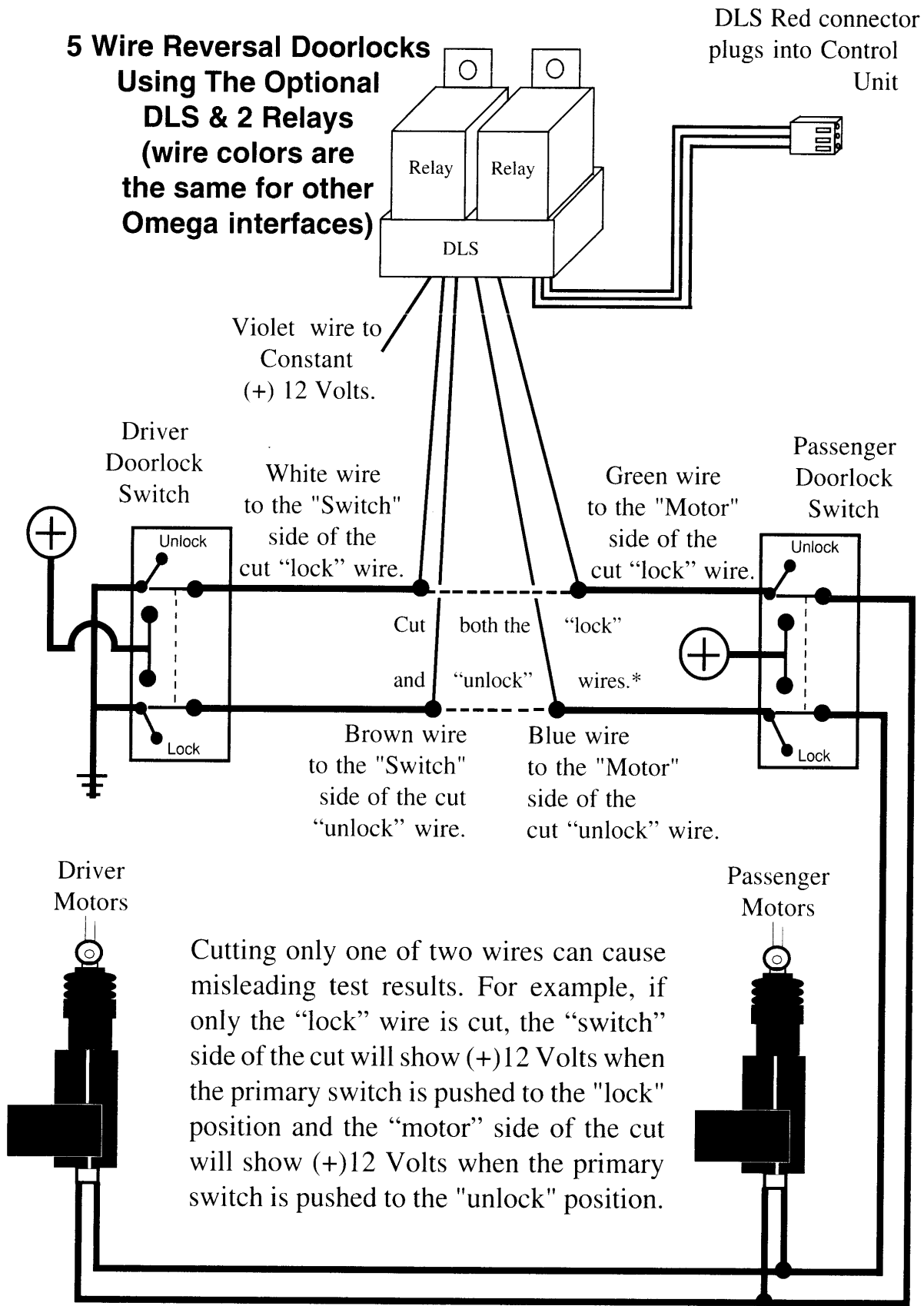
5 Wire Reversal Rest At Ground Systems differ from the Negative and Positive Pulse systems as there are no relays or doorlock control unit. In this type of system, the switches themselves supply the positive voltage directly to the doorlock actuators, and, more importantly, provide the return ground path. The important thing to remember is the wires in this system *rest at ground*, which means that the wires must be "opened", or cut, to make the connections.

Examine the wires on the back of the switch. Normally five wires will be found- one will be constant 12 volts positive, regardless of the switch's position; two wires will be grounded regardless of the switch's position. Of the two remaining wires, one will show 12 volts positive when the switch is pushed to "lock", and the other will show 12 volts positive when the switch is pushed to "unlock".

The two later wires are both routed to the doorlock actuators and are connected to either end of the actuator's motor winding. When the switch is pushed to one position, one of these two wires will have 12 volts. This voltage flows through the wire to the actuator's motor winding, and since the other wire is still *resting at ground* an electrical circuit is completed. When the switch is pushed to the opposite position the electrical flow is *reversed*.

Once determined, the correct wires must be cut. Notice in the following diagram that the driver's switch is the primary switch and referred to as the "switch" wires. The wires that go to the secondary switch are referred to as the "motor" wires. Even though the cut is made between the switches, the two sides are still correctly called the "switch" and the "motor" sides, with consideration of "Primary" and "Secondary" switch.

**5 Wire Reversal Doorlocks
Using The Optional
DLS & 2 Relays
(wire colors are
the same for other
Omega interfaces)**



Backup Battery Port, Harness and Bracket (White 2-Pin Connector)

If the backup battery feature is desired, open the battery compartment on the control module by sliding the top rear of the case outward. Plug the 2-pin wiring harness onto the battery, and then plug the 2-pin connector into the backup battery port inside the module. Insert the 9-volt battery into the cavity in the case, and secure it by reinstalling the case door and sliding it closed.

Sensor Ports (Two White 4-Pin Ports)

Install the included impact and glass breakage sensor according to the instruction sheet included with it, and then plug its wiring harness into either of these ports (their operation is the same). The second port allows an easy plug-in addition of an optional second sensor.

Data Port (Green 4-Pin Port)

Omega data bus interface modules, and remote start bypass modules, are available as analog-operated, and as direct data-to-data (D2D) devices. The former may be operated by connection to the DLS port. The later are the Omega IntelliKit data bus interface modules and bypass kits, which simply plug into this Green port. Either type of Omega accessory module includes its own vehicle-specific instructions. Please refer to the Omega website, www.caralarm.com, for the latest vehicle-specific application guide. **Although other brands of data bus modules may physically plug into the Crime Guard data port, only genuine Omega IntelliKit modules offer the highest consistent quality and dependable operation.** Always choose Omega databus product for use with this port.

- SEE PAGE 33 FOR PROGRAMMING INSTRUCTIONS -

Each of the Programmable Features is described in detail in the following pages. The programming instructions, and an easy reference features' list, are found after the features' descriptions.

The Programmable Features

The Crime Guard 750i⁶ and 650i⁶ both share the same comprehensive suite of Programmable Features. These are:

- 1 SecureCode
- 2 Last Door Arming
- 3 Automatic Rearming
- 4 Starter Interrupt Functions
- 5 Ignition Activated Override
- 6 Doors Lock With Ignition On
- 7 Doors Unlock With Ignition Off
- 8 Open Door Bypass To Previous Two Features
- 9 Confirmation Chirps
- 10 Confirmation Chirp Volume
- 11 Activated Alarm Cycle
- 12 Lights On Upon Disarm
- 13 Disarm Alarm Upon Trunk Release
- 14 Arming Delay
- 15 Steady Siren Output / Pulsed Horn
- 16 Alarm Functions Bypass
- 17 Ignition Activated Anti-Carjacking Protection
- 18 Door Activated Anti-Carjacking Protection
- 19 Remote Activated Anti-Carjacking Protection
- 20 Open Door Warning Upon Arming
- 21 III Button Operation
- 22 Doorlock Functions
- 23 Lock Relay Functions
- 24 Unlock Relay Functions

Use the step-by-step instructions on page 33, and the complete features matrix on page 34, to change any of the programmable features. Each feature, the option choices and related programming controller/transmitter button assignment are described in detail in the following pages.

Feature #1 SecureCode

Factory Default Setting 1 Press

Options:

1 to 9 presses, in each of two stages

SecureCode is a unique patented feature which allows the user to custom select the number of Valet Switch presses in two stages, instead of a single “1 press”, which would be required in order to perform an Emergency Override. If any of the three anti-carjacking features are utilized, a customized SecureCode would also be required to turn it off once it is fully activated. The SecureCode operation is described in detail the Operations Guide.

To custom program a new SecureCode:

- Step 1** Follow Steps 1 to 4 in the previous “How to Program Features” instructions; at Step 4 the Valet Switch will be pressed and released once (the siren chirps once) to access “feature #1”.
- Step 2** Within 10 seconds slowly press and release the controller or transmitter’s “**arm/lock**” button the number of times equal to the desired SecureCode for stage 1, allow the system to respond to each controller/transmitter button press with a siren chirp before pressing the button again.
- Step 3** After entering the first stage by pressing the “**arm/lock**” button the desired number of times, and receiving a chirp for each press, wait for the system, after the final button press, to chirp the siren again the total number of times that the button was pressed.
- Step 4** Continue to configure stage 2 of the SecureCode by now pressing and releasing the “**disarm/unlock**” button the number of times desired for the stage 2. This should be done in the exact same fashion as the stage 1 entry-press the “**disarm/unlock**” button, wait for a single chirp before pressing the button again, and then when final button press is done, wait after the single chirp for the siren to chirp the total number entered Valet Switch entry.

Feature #2 Last Door Arming

Factory Default Setting Off

(press “**arm/lock**” button to program)

Options:

On without doors locking (press “**disarm/unlock**” button to program)

On with doors locking (press “**II**” button to program)

“Last Door Arming” has the system automatically arm itself every time the operator exits the vehicle and closes the door. This feature turns that operation on or off, and with options of having Last Door Arming operate with or without also locking the doors when the system does arm.

Feature #3 Automatic Rearming

Factory Default Setting **Off**

(press “**arm/lock**” button to program)

Options:

On without doors locking (press “**disarm/unlock**” button to program)

On with doors locking (press “**II**” button to program)

“Automatic Rearming” prevents the system from becoming accidentally disarmed by having it arm itself after being disarmed, if a door is not then opened or the ignition turned on. Options are to have Automatic Rearming operate with or without also locking the doors when the system does rearm.

Feature #4 Starter Interrupt Functions

Factory Default Setting **On**

(press “**arm/lock**” button to program)

Options:

Off (press “**disarm/unlock**” button to program)

Automatic (press “**II**” button to program)

This feature controls the Starter Interrupt circuit, in several ways. In its default setting, “On”, the Starter Interrupt is operable whenever the alarm is armed.

The “Automatic” option will cause the Starter Interrupt output to automatically engage 90 seconds after the ignition switch is turned “off”, and also 90 seconds after disarming the system. This automatic engagement will occur even if the security system is in a disarmed state, but not if it is in Valet Mode. Once the Starter Interrupt output is activated, the system must be armed, then disarmed with the controller or transmitter, or placed into the Valet Mode by pressing and holding the Valet Switch for 2 seconds to disengage it. There are no Status Light indications with this automatic form of Starter Interrupt.

Programming this feature “Off” completely eliminates the Starter Interrupt output, while leaving all other system operations fully functional.

Feature #5 Ignition Activated Override

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

This feature allows an activated system to be overridden and disarmed by simply turning the ignition switch on within 10 seconds of the system’s activation. After 10 seconds, the Emergency Override must be performed or the controller or transmitter “**disarm/unlock**” button can be used to disarm the system.

Feature #6 Doors Lock With Ignition On

Factory Default Setting **On** (press “**arm/lock**” button to program)

Option: **Off** (press “**disarm/unlock**” button to program)

This feature configures the system to automatically lock the vehicle’s doors every

time that the ignition switch is turned on. An exception to this would be if feature #8 is turned on, and a door being open when the ignition switch is turned on. The following feature #7 controls the automatic unlocking operations, and feature #8 provides for an override of this automatic locking if a door is open when the ignition is turned on.

Feature #7 Doors Unlock With Ignition Off

Factory Default Setting **On (all doors will unlock)***
(press “III” button to program)

Options:

Off (press “arm/lock” button to program)

Driver’s Door Only* (press “disarm/unlock” button to program)

All Doors Except Driver’s Door* (press “II” button to program)

Similar to the previous locking feature, except this feature controls the unlock operations when the ignition is turned off, and it has more options because of the multiple unlocking outputs of the DLS port.

*Multiple unlock outputs offer the capability of unlocking only the driver’s door when the system is disarmed (Driver Door Priority Unlocking), and then the option of unlocking all doors with a second press of the “disarm/unlock” button. **The driver’s door unlocking differently from the other doors must be configured when the system is installed!**

If the system is installed without the Driver’s Door Priority Unlocking interface, this feature unlocks all of the doors when the ignition switch is turned off. If Driver’s Door Priority Unlocking is installed, this feature can control only the driver’s door unlocking when the ignition is turned, all doors unlocking, or all doors except the driver’s. The following feature provides for an override of this automatic unlocking if a door is open when the ignition is turned off.

Feature #8 Open Door Bypass of Ignition Locking

Factory Default Setting **On** (press “arm/lock” button to program)

Option: **Off** (press “disarm/unlock” button to program)

This feature cancels the automatic locking or unlocking of the vehicle’s doors should one of the doors is open when the ignition switch is turned on or off.

Feature #9 Confirmation Chirps

Factory Default Setting **On**
(press “arm/lock” button to program)

Options:

Off (press “disarm/unlock” button to program)

Chirps Excepting Valet Mode (press “II” button to program)

Chirps in Valet Mode Only (press “III” button to program)

This feature removes the system’s 1 arming and 2 disarming confirmation chirps.

When this feature is used to remove these chirps, the system will still have 3 chirps upon arming if a protected zone is violated, and still have 4 chirps upon disarming if the system was previously activated. Using this feature to turn off the arm and disarming chirps will also not affect the Prewarning operation, Unauthorized Transmitter Alert (if used), nor will it affect the chirps used when programming.

The other two settings will have the confirmation chirps operate only when the system is in Valet Mode, and not otherwise; or, the chirps will operate except when the system is in Valet Mode.

Feature #10 Confirmation Chirp Volume

Factory Default Setting

Medium High

(press “**II**” button to program)

Options:

Low (softest)

(press “**arm/lock**” button to program)

Medium Low

(press “**disarm/unlock**” button to program)

High (loudest)

(press “**III**” button to program)

This feature allows the choice of four different volume levels of the system’s confirmation chirps, and when programming it, the buttons can be repeatedly and sequentially pressed, thus making it easy to hear and choose the setting with the best chirp volume. This feature operates regardless of how feature #15, “Steady Siren” or “Pulsed Horn” is set.

Feature #11 Alarm Duration

Factory Default Setting

30 Seconds

(press “**arm/lock**” button to program)

Options:

60 Seconds

(press “**disarm/unlock**” button to program)

90 Seconds

(press “**II**” button to program)

120 Seconds

(press “**III**” button to program)

This feature allows four choices of the Alarm Duration, which is the period of time for which the system sounding the siren (and/or horn, optionally) and flashes the parking lights when it is triggered. **Caution: Before lengthening the Alarm Duration you should always check and determine if there are any local anti-noise or nuisance ordinances to avoid the possibility of the system user receiving a violation citation.**

Feature #12 Parking Light Illumination Upon Disarm

Factory Default Setting

On

(press “**arm/lock**” button to program)

Option:

Off

(press “**disarm/unlock**” button to program)

This feature affects the parking light operation when the system is disarmed. When this feature is turned on, the parking lights flash once, and then turn back on for external illumination for 30 seconds unless the ignition key is turned on during that

time. If this feature is turned off, the parking lights flash once only, and do not illuminate. This feature only affects the Crime Guard's parking light operation, and not the interior light operation.

Feature #13 2nd Channel Also Disarms System

Factory Default Setting **On** (press “arm/lock” button to program)

Option: **Off** (press “disarm/unlock” button to program)

“2nd channel” is most commonly used to remotely open the vehicle's trunk, in which case the alarm should also disarm. This feature, turned on, configures the system to disarm when the 2nd channel is used. If turned off, the 2nd channel output will still occur, but without the chirps, parking light flashes, or disarming the alarm (if armed).

Feature #14 3 or 45 Second Arming Delay

Factory Default Setting **3 Seconds**
(press “arm/lock” button to program)

Options:

15 Seconds (press “disarm/unlock” button to program)

30 Seconds (press “II” button to program)

45 Seconds (press “III” button to program)

When the system is armed, whether by the controller, transmitter or by an automatic feature, there is a brief period of time in which a system activation, or alarm, cannot occur. This Arming Delay allows the system to completely process its sensory parameters, which can include the vehicle to stabilize. In some cases more time is needed than the factory-set 3 seconds, and this feature offers three longer delay options.

Feature #15 Steady Siren or Pulsed Horn

Factory Default Setting **Steady Siren**
(press “arm/lock” button to program)

Options:

Pulsed Horn Low (press “disarm/unlock” button to program)

Pulsed Horn Medium (press “II” button to program)

Pulsed Horn High (press “III” button to program)

It is important to understand that the Crime Guard has a primary audible output, for the electronic siren; and that it also has a programmable relay which among its applications is being used to sound the vehicle's existing horn. This feature changes only the primary audible output, so that it can be utilized to sound the existing horn by itself. This is for cases when the programmable relay is desired for other features, such as unlocking the doors, or as an additional ignition or accessory output should it be needed for the remote starting operation.

The Steady Siren setting is exactly that- a steady output which the electronic

siren requires. When programming this feature for using the output for the vehicle's horn, the optional setting produce pulsed output on the system's siren wire, in three different pulse timings, which allow a degree of customizing of the horn's sound during the alarm activation.

Feature #16 Alarm Functions Bypass

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

This feature converts the system into a strictly Remote Keyless Entry System by eliminating all antitheft alarm-oriented operations and features. When this feature is programmed on, the Crime Guard has remote keyless entry operation only.

Feature #17 Ignition Activated Anti-Carjacking Protection

Factory Default Setting **Off** (“**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

This form of Anti-Carjacking is initiated by the ignition key being turned on. All 3 forms of Anti-Carjacking protection are described in the Operation Guide.

Feature #18 Door Activated Anti-Carjacking Protection

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

This form of Anti-Carjacking is initiated by a door being opened. All 3 forms of Anti-Carjacking protection are described in the Operation Guide.

Feature #19 Remote Activated Anti-Carjacking Protection

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

This form of Anti-Carjacking is initiated by a signal from the controller or transmitter. All 3 forms of Anti-Carjacking protection are described in the Operation Guide.

Feature #20 Open Door Warning Upon Arming

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

When this feature is turned on, if one of the vehicle's doors is open at the time that the system is armed via the controller or transmitter, the siren will chirp 3 times and the parking lights will flash 3 times instead of once.

Feature #21 “III” Button Operation

Factory Default Setting **3rd Channel**
(press “**arm/lock**” button to program)

Options:

Panic (press “**disarm/unlock**” button to program)

4th Channel (press “**II**” button to program)

5th Channel (press “**III**” button to program)

This feature changes how the controller’s or transmitter’s “**III**” button operates. Normal operation, or the default setting, has the “**III**” button operate the Panic feature. This feature allows changing it to instead operate the 3rd channel or either of the two other optional channel outputs. Panic can still be operated, by the alternative methods of pressing either the “**arm/lock**” and “**disarm/unlock**” button for 3 seconds.

Feature #22 Doorlocking Functions

Factory Default Setting .8 Second Lock & Unlock Output
(press “**arm/lock**” button to program)

Options:

3 Second Lock & Unlock Output (press “**disarm/unlock**” button to program)

Double Pulse Unlock Output (press “**II**” button to program)

Total Closure Lock Output (press “**III**” button to program)

This single feature gives the installer several needed options, to match the security system’s doorlocking outputs to suite different vehicle requirements.

- The first setting (programmed by the “**arm/lock**” button) has the system produce both the lock and unlock outputs as .8 second in duration. This is the most common form of output needed, which interfaces most vehicles.
- The second setting (programmed by the “**disarm/unlock**” button) changes the lock and unlock outputs to be a longer 3 second pulse output. This is for certain vehicles which require a longer output pulse from the system’s control unit; typically cars having vacuum pump systems, although the longer setting is also more suitable in some newer vehicles.
- Some newer vehicles require a double pulse output to remotely unlock the doors and/or to disarm a factory-equipped security system, which is what the Double Pulse Unlock setting provides (it is programmed by the “**II**” button). The lock output pulse, in this setting, is .8 second.
- The Total Closure Lock Output (programmed by the “**III**” button) may be used with vehicles which are originally equipped with the total-closure feature. Typically, a total closure feature is when locking the vehicle’s doors if the key in the door is held to “lock” for a period of time the vehicle will close all windows and the sunroof, in addition to locking the doors. Selecting this feature setting changes the system’s door lock output pulse from a .8 second to as long as a 28 second duration output. The unlock output is 3 seconds in this setting.

Note: When this feature is turned on, during the 28 second period after arming the system, the lock output can be stopped on demand by the user by

pressing the “**arm/lock**” or “**disarm/unlock**” button. Only the output itself will stop- pressing either button again will normally operate the system, and at any time after the 28 second lock output period ends.

If either of the programmable relays are set for lock or unlock operation (the next two Programmable Features), the settings if this feature will operate the programmable relays accordingly, in addition to the primary system doorlocking outputs.

Feature #23 Lock Relay Functions

Factory Default Setting

Door Lock Output

(press “**arm/lock**” button to program)

Options:

Parking Light Output

(press “**disarm/unlock**” button to program)

Channel 4 Latch Output

(press “**II**” button to program)

Channel 4 On Demand Output

(press “**III**” button to program)

Both Crime Guard models have two built-in relays, which can be programmed to perform several different functions. Although the primary function, or default setting, of this relay is to operate as a door “lock” function, there are many vehicles which don’t actually require a relay in which case the relay is available for the optional functions. Other options for this relay are parking light flash, which has the same operation as the White wire, and an additional remote output, operated by the controller/transmitter’s “**arm/lock**” and “**II**” **buttons** together, and in two forms: “Latch”, in which the output toggles with each buttons press, and “On Demand” which is output while the buttons are being pressed. Feature #21 can change this channel’s button assignment, and see more details on this relay’s total functions, in the wiring instructions found on pages 14-17.

Feature #24 Unlock Relay Functions

Factory Default Setting

Door Unlock Output

(press “**arm/lock**” button to program)

Options:

Horn Output

(press “**disarm/unlock**” button to program)

Channel 5 Latch Output

(press “**II**” button to program)

Channel 5 On Demand Output

(press “**III**” button to program)

This is the second of two built-in relays which can be programmed to perform several different functions. As described above for the “lock” relay, the primary function of this second relay is the “unlock” function, which in many cases is not required and making the relay available for other uses. In the case of this relay, a very popular application is operating the vehicle’s existing horn; either in conjunction with the electronic siren, or in place of the siren. Using both the siren and the horn creates an extremely effective security system. The remaining options are Channel 5, with the same operation parameters as described above for Channel 4. See the wiring instructions on pages 14-17 for additional details.

Programming Features

Enter Programming mode:

- | | |
|---------------|---|
| Step 1 | Turn the vehicles's ignition on. |
| Step 2 | Turn the ignition off. |
| Step 3 | <p><u>Within 5 seconds</u>, Press & Release the Valet Switch 5 times.</p> <ul style="list-style-type: none">• The siren will chirp then sound briefly and the Status Light will light steady to confirm that the system is entering Programing Mode. |

Access a Feature:

- | | |
|---------------|--|
| Step 4 | <p><u>Within 10 seconds</u>, Press & Release the Valet Switch the same number of times as the desired feature's number.</p> <ul style="list-style-type: none">• The siren will chirp and the Status Indicator Light will flash off the same number of times as the Valet Switch was pressed to indicate the feature number accessed. |
|---------------|--|

Change the Feature:

- | | |
|---------------|--|
| Step 5 | <p>After accessing the desired feature, <u>within 10 seconds</u> Press & Release the appropriate controller or transmitter button.</p> <ul style="list-style-type: none">• Pressing the “arm/lock” button typically turns the feature on; or sets the feature's first option. The siren will chirp once when this button is pressed.• Pressing the “disarm/unlock” button also typically turns the feature off; or, sets the feature's second option. The siren will chirp twice.• Many features have third, and even fourth setting options. Pressing the “II” and “III” buttons select these options. Confirmation chirps when these buttons are pressed are three and four chirps respectively. |
|---------------|--|

To Access and Change further Features:

- | | |
|---------------|---|
| Step 6 | <p>If there are more features to be programmed, <u>within 10 seconds</u> of the previous action Press & Release the Valet Switch the same number of times as the next desired feature's number.</p> <ul style="list-style-type: none">• Again the siren will chirp and the Status Indicator Light will flash as many times as the Valet Switch was pressed to indicate the new feature number which is now accessed. Then use the controller or transmitter as described in Step 5 to change the newly accessed feature as desired. |
|---------------|---|

Exit Programming mode:

- | | |
|---------------|---|
| Step 7 | <p>Allow 10 seconds to pass without performing any programming actions, or turn the vehicle's ignition on.</p> <ul style="list-style-type: none">• The siren will sound briefly and the Status Indicator Light will go out. |
|---------------|---|

Complete Programmable Features Matrix

Features		Ignition on, off, then press Valet Switch 5 times (Status Light turns on steady).			
#	Feature	Default Setting	Option	2nd Option	3rd Option
1	SecureCode	1 & 0	2 stages, of up to 9 presses each (total of 99 possible combinations)		
2	Last Door Arming	OFF (L)	ON w/o doorlock (U)	ON w/ doorlock (2)	
3	Automatic Rearming	OFF (L)	ON w/o doorlock (U)	ON w/ doorlock (2)	
4	Starter Interrupt Functions	Alarm only (L)	Off (U)	Automatic (2)	
5	Ignition Activated Override	OFF (U)	ON (L)		
6	Doors Lock With Ignition On	ON (L)	OFF (U)		
7	Doors Unlock With Ignition Off	ON (3)	OFF (L)	o/p 1 only (U)	o/p 2 only (2)
8	Open Door Bypass to above	ON (L)	OFF (U)		
9	Confirmation Chirps	ON (L)	OFF (U)	exc. Valet (2)	Valet only (3)
10	Confirmation Chirp Volume	Medium Loud (2)	Low (L)	Med Lo (U)	Loud (3)
11	Activated Alarm Cycle	30 Seconds (L)	60 Sec. (U)	90 Sec. (2)	120 Sec. (3)
12	Lights On Upon Disarm	ON (L)	OFF (U)		
13	Disarm Upon Trunk Release	ON (L)	OFF (U)		
14	Arming Delay	3 Seconds (L)	15 Seconds (U)	30 Seconds (2)	45 Seconds (3)
15	Steady Siren / Pulsed Horn	Steady Siren (L)	Pulsed Horn Lo (U)	Pulsed Med. (2)	Pulsed Hi (3)
16	Alarm Functions Bypass	OFF (U)	ON (L)		
17	Ignition Anti-Carjacking	OFF (U)	ON (L)		
18	Door Anti-Carjacking	OFF (U)	ON (L)		
19	Remote Anti-Carjacking	OFF (U)	ON (L)		
20	Open Door Warning at Arm	OFF (U)	ON (L)		
21	III Button Operation	3rd Chan. (L)	Panic (U)	4th Chan. (2)	5th Chan. (3)
22	Doorlock Functions	.8 second (L)	3 Seconds (U)	Double Unlock (2)	Total Closure (3)
23	Lock Relay Functions	Lock (L)	Parking Light (U)	Channel 4 Latch (2)	Channel 4 On Demand (3)
24	Unlock Relay Functions	Unlock (L)	Horn, med (U)	Channel 5 Latch (2)	Channel 5 On Demand (3)



OMEGA

LIE70160

Serial Number
[REDACTED]

**This is the Serial Number
of your new security and
convenience system.**

Please take a moment to register your warranty with us!

Registering your warranty with Omega Research and Development automatically increases the product's standard warranty, from 1 year to as long as you own your vehicle.

Additionally, depending on your Omega security system's configuration, registering your warranty may include participation in the Vehicle Theft Protection Program plan, which pays your insurance deductible if your vehicle is stolen (see details on the other side).

Registering your warranty is easy -

Go to **www.caralarm.com** on the Internet
or use the mail-in method which
is included with this card.

\$2,500.00 Vehicle Theft Protection Program

In the event the original purchaser's vehicle is stolen in the United States or Canada within one year from the date of purchase, and the Omega system has a **starter interrupt** installed with it, Omega Research and Development will pay to the original purchaser an amount equal to the purchaser's automobile theft insurance deductible for the stolen vehicle up to \$2,500.00 provided the following terms and conditions are satisfied:

- The vehicle was stolen as a result of security system failure and not recovered within 60 days.
- The vehicle was not stolen while on the premises of, or in the care of an automotive repair shop, service station or car dealership.
- The Omega Security System was purchased and installed by an Authorized Dealer in good standing at the time of purchase and installation.
- The Warranty Registration must have been submitted in its entirety within ten (10) days of the installation (by Internet) or mailed (postmarked) within ten (10) days of the installation.
- Claims must include a dated copy of the Authorized Dealer's sales receipt, and a copy of the reverse side of this card, showing the product serial number.
- A verifiable copy of the police department's crime report and insurance theft claim report as well as the vehicle insurance documentation defining the vehicle identification number (V.I.N.) and the deductible amount must be submitted with the claim and postmarked no later than twenty (20) days from the date of the theft.
- One of the transmitters which operated the Security System must be included with the above items.
- To file a claim, send the above items to:

Omega Research and Development, Inc.
981 North Burnt Hickory Road, Douglasville, GA, 30134

**Retain this product
serial number card.**

Crime Guard

Keyless Entry and Security

OPERATION GUIDE



**Simultaneous Horn Honk & Siren
Alert Capability**

**Dual Zone Shock Sensor With
Glass Breakage Detection**

Backup Battery Included

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5
N

This device complies with FCC Rules part 15. Operation is subject to the following two conditions, (1) This device may not cause harmful interference and, (2) This device must accept any interference that may be received, including interference that may cause undesired operation.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Coin batteries used in the transmitter which is used to operate this security system may contain Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate

One or more of these patents may apply to this product:

#5,612,669 #5,654,688 #5,663,704 #5,729,191 #5,818,329 #5,612,578 #5,739,747
#382,558 #385,878 #5,750,942 #5,739,748 #5,719,551 #406,107 #701,285
#5,973,592 #5,982,277 #5,986,571 #6,011,460 #6,037,859 #6,049,268 #6,130,605
#6,130,606 #6,140,938 #6,140,939 #6,150,926 #6,144,315 #6,184,780 #6,188,326
#6,243,004 #6,249,216 #6,275,147 #6,297,731 #6,320,514 #6,320,498
Foreign Patent #199700312 #EP0817734B1 #98906445.6 #2,320,248 #701,285

Omega Research and Development, Inc.
www.caralarm.com

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Introduction to the System

Congratulations for your choice of the most versatile, fully-featured vehicle security and convenience system available today, the Crime Guard 750i⁶ by Omega Research and Development. To enjoy the most from your new system, please take a few moments to learn about the principal user components, and the basic operation of the system. These subjects are found in next several pages, followed by more detailed specifics of complete operations and features.

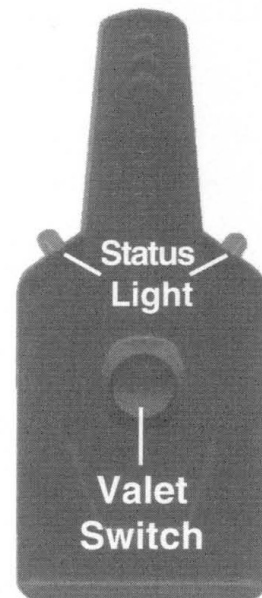
One of the components, typically mounted on the windshield, is the **Window Unit** module which contains the **Status Lights** and the **Valet Switch**. The window unit also receives and transmits the Echo technology communications for the system's 2-way operation.

The Red colored Status Lights report the operational status of the system at all times, and also serves as a visual deterrent to break-ins and theft. Specific description of the Status Light operation may be found on page 16.

The Valet Switch has three main functions:

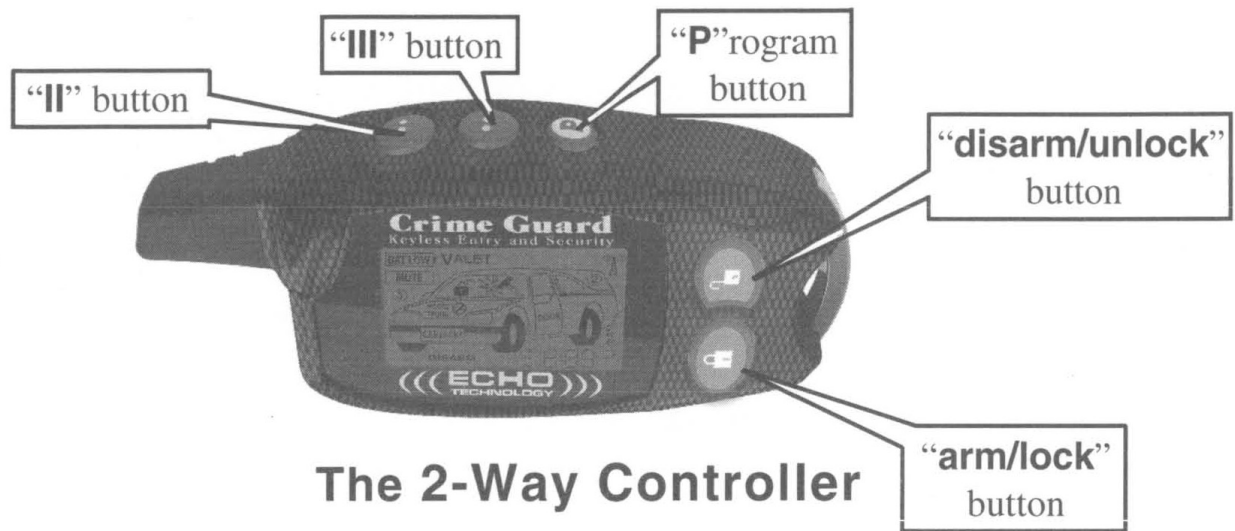
- The Valet Switch can be used to turn off the system's security functions, including any automatic arming or locking features (if used). Keyless entry functions will still operate. This is placing the system into "Valet Mode".
- The Valet Switch can also be used, in conjunction with the vehicle's ignition key, to perform an emergency disarming of the security system in the event the transmitter or transceiver is lost or becomes inoperable. This is referred to as "performing an Emergency Override".
- The Valet Switch is used in the procedure of programming operational features and also for encoding transmitters and transceivers to the system.

A complete description of the Valet Switch and its operations is on pages 14-15.



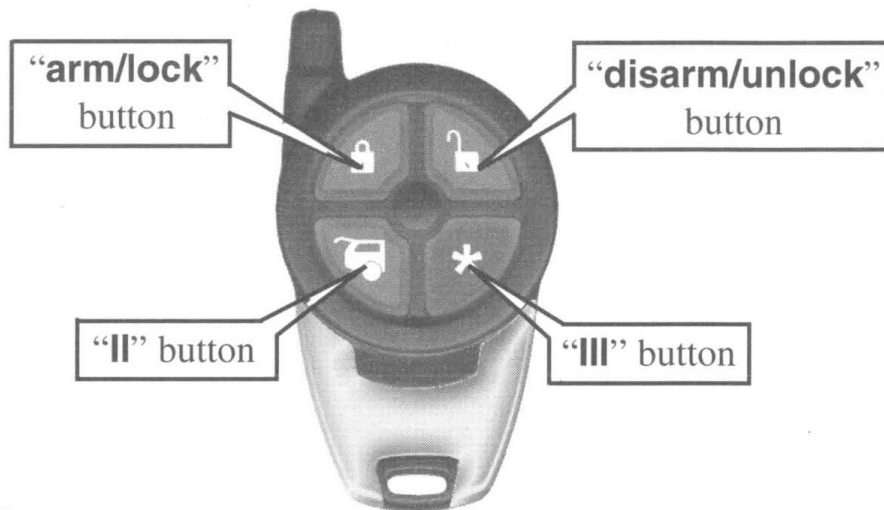
The system can be operated by two types of devices: the **2-Way Controller** and the **1-Way Transmitter**. Your system comes with one of each of these, pre-learned to operate the system. The controller, in addition to operating your system, also receives signals from the system, and displays a variety of system conditions on its LCD screen. This is the patented Echo 2-way technology. The transmitter will fully operate the system, but it can not receive signals nor report events from the vehicle. Your system can be operated by as many as four controllers and/or transmitters.

The controller and the transmitter both share the same four operational buttons, and their use to operate the system is the same. These buttons and a brief description of what they do are:



The 2-Way Controller

The 1-Way Transmitter



"arm/lock"

- Pressing and releasing the "**arm/lock**" button arms the security system and locks the doors.
- Pressing and holding this button for three seconds will first arm, and then activate the Panic feature, locking the doors.
- Pressing and releasing this button 2 times within 5 seconds will activate the 2-way controller's **parking timer** which you can use to time how long you've parked your vehicle in a particular spot or parking meter.

"disarm/unlock"

- Pressing and releasing the "**disarm/unlock**" button disarms the system and unlocks the doors unless the alarm is triggered, in which case it will disarm the activated alarm, but not unlock the doors unless the button is pressed again.
- Pressing and holding this button for three seconds will first disarm, and then activate the Panic feature, unlocking the doors.
- The unlock operation may be optionally configured during the system's installation so that pressing this button once disarms the system and unlocks only the driver's door, and pressing a second time unlocks all of the doors.

“II” or “⌂”

- Pressing the “II” button for two seconds can be used to activate an extra output, known as the “2nd channel”, for an optional function such as trunk release.
- Pressing and releasing this button twice arms or disarms the system without the confirmation chirps.
- Pressing this button immediately after arming will leave the alarm armed, but with the shock sensor feature bypassed.

“III” or “?”

- Pressing and releasing the “III” button 2 times in 5 seconds will activate the 3rd channel output. This will also activate a factory remote start if your vehicle is equipped and the system is configured to do so.
- The “III” button can be reprogrammed for additional operations. See programmable feature #21.

“P” on the controller only.

- The controller has a fifth button, “P”, which will illuminate the LCD screen when pressed. This is also the “Programming” button; it is used to customize controller operations, which is explained on pages 19 and 20.
- **Multi-car selection:** The 2-way controller can operate up to 2 separate systems. Pressing the “P” button and the “lock” button at the same time for 1 second will select **CAR 1** and pressing the “P” button and the “unlock” button at the same time for 1 second will select **CAR 2** as indicated on the controller’s display.

How the 2-Way Echo controller reacts is included in the following general system operation descriptions, and then a more detailed description the Echo’s icons and instructions for its programming are detailed on pages 17-20.

- IMPORTANT -

The Crime Guard 750i⁶ is one of the most versatile vehicle security systems made. It has many programmable features which can offer more functions and operations beyond which are described in the basic system instructions.

To a large degree, these extra features and operations are configured at the installation of the system. Please read the sections of this manual which explain programmable features, and please consult your installer for specifics on how your system is configured, and for installation options which may have used, or can be added to system after installation.

EXAMPLE- the system can sound the vehicle’s horn in place of or in addition to the electronic siren which is included with it. But the operations are described with the siren only.

Using the System

Your system is designed to deter theft of both your vehicle and its contents. **“Arming”** your system turns on the protection, disabling the vehicle’s starter and locking the doors. Once the system is **Armed**, any intrusion attempt will **Activate** it, sounding the electronic “Psyren” psycho siren and flashing the parking and interior lights to attract attention. The unique and patented “2-in-1” Psyren psycho siren actually produces the sounds of two different sirens at once, ensuring that it won’t be ignored like all of the other “common” car alarms. **Disarming** the system turns off the protection, unlocking the doors and turning on the parking and interior lights, allowing lighted access to, and normal use of, the vehicle.

There are two methods of arming the system:

- 1-** The first method is to use the controller* or transmitter, by pressing and releasing the **“arm/lock”** button. The system must not already be armed or be in Valet Mode, and the vehicle’s ignition key must be off.
- 2-** The second method is Last Door Arming, which configures the system to automatically arm itself every time you exit the vehicle. This method of arming is programmable, and may be used or not used as desired.

Regardless of how it became armed, if the system is armed the window unit’s Status Light flashes in the red color.

*If the 2-way controller is used to operate the system, it will receive a signal back and confirm that the arming operation was performed.

Arming Using the Controller or Transmitter

The system can always be armed from the controller or transmitter, if the ignition key is “off” and the system is not in the Valet Mode. To arm the system, exit the vehicle, close all of the doors, and simply **press and release the “arm/lock” button once**.

The system’s reaction: The parking lights will flash once, the siren will chirp once and the Status Light will begin to flash red, confirming that the system is armed.* In addition, the doors will lock and the starter interrupt will engage to prevent any attempt to start the vehicle. Your security system is now fully armed, and is ready to respond if an intrusion attempt is detected.

If the controller was used: Immediately after the system responds the controller will chirp twice (or four times if a zone is bypassed), the “ARM” icon will appear, the “locked lock” icon appears, confirming that doors have locked, and the number of operating transmitters or controllers is briefly displayed.

*The system is described in its most common and basic configuration, with doorlocks connected, and the interior lights connected. Also, the vehicle horn may be used in place of, or in addition to, the system’s electronic siren.

The system's separate "**arm/lock**" and "**disarm/unlock**" button design allows repetitive operation- if already armed, pressing the "**arm/lock**" button will simply rearm the system, and vice versa when pressing the "**disarm/unlock**" button. Controllers and transmitters both operate in this fashion.

Arming Bypass: Upon arming, if any system sensing circuit is inoperable, that circuit only will automatically be bypassed. When an unsecured sensing circuit is in a bypassed state, all other normally operating circuits will be protected. Should the bypassed circuit become secured, it will automatically be reinstated for protection 5 seconds later. When certain protection circuits are bypassed, such as the hood/trunk and impact sensor, and the system is armed, it will indicate this by chirping the siren three times and flashing the parking lights three times instead of the normal arming indication of one chirp and one flash.

For example, should the trunk be open, such as containing an oversized object, you can still arm the system with the transmitter, and in this case the arming indicator will be 3 siren chirps and 3 parking light flashes. Arming Bypass will only operate when arming the system with the transmitter.

If the controller was used for the arming, it will chirp three times instead of the normal one time, and its display will also flash the icon of the zone which is bypassed.

Sensor Bypass: When arming the system with the controller or transmitter, you may conveniently and easily temporarily deactivate the impact sensor without affecting the system's other sensing circuits. To deactivate the sensor, arm the system by pressing the "**arm/lock**" button, then press and release the transmitter's "**II**" button within three seconds. You will hear a second siren chirp confirming that the security system has armed without the sensor protecting the vehicle. The next time the system is armed normally with one "**arm/lock**" button press, the sensor will again be part of your protection.

If the controller is used for the arming and then bypassing the sensor, let it confirm the arming, then press the "**II**" button. The controller will then chirp twice and turn on its "Impact" icons to indicate the bypassed sensor.

Automatic "Last Door Arming" of the System

The system can also be programmed to automatically arm itself, and in this process, to lock or not lock the doors. When this feature is utilized, closing the vehicle's last door will cause the siren to chirp once, the parking lights to flash once and the Status Light to start rapidly flashing red. Thirty seconds later the siren will chirp again and the parking lights will flash again, the doors will lock (which is separately programmable) and the Status Light will slow to a steady red flash, confirming that the security system is fully armed. If a point of entry is reopened before the single siren chirp at 30 seconds, the Last Door Arming process stops, and will reset to start over when the point of entry is again closed. All protected entries

must be closed to initiate the Last Door Arming sequence.

To temporarily prevent the system from automatically Last Door Arming, you have these options: put the system into Valet Mode (page 14 and 15), leave the door open, or, in most cases turning on the dome light may cause the system to detect that your door is still open. Leaving the ignition key turned "on" is not recommended.

Last Door Arming offers a high level of security, since you do not have to remember to arm the security system every time you leave the vehicle, and using it may entitle you to an insurance discount (please check with your agent or carrier).

While the System is Armed, and should it Trigger

While the security system is armed, the Status Light flashes red in color. Should any intrusion attempt be detected, the system will instantly activate, or "trigger". Once triggered, the system loudly sounds the siren and flashes the parking and interior lights on and off.

When it is first triggered, the Status Light changes its red flash pattern, and the doors will automatically relock. Should a door be open when the system triggers, it will wait until the door is closed, and at that time relock the doors. The automatic relocking of the doors denies access to the thief, and is just one of the many exclusive patented features of the system. The siren will sound and the parking and interior lights will flash for 30 seconds unless you disarm the system first (60, 90 and 120 seconds activated periods are options- see Feature #11, page 30). If all protected entries are secure at the end of the 30 seconds, the system will stop and rearm itself, ready to detect further entry attempts. If there is a protected entry still open or the impact sensor still in a violated state at the end of 30 seconds, the system will reactivate for two more 30 second cycles. In this case the system will stop after a total of 3 cycles and rearm automatically, and then ignore only the open entry or violated sensor. When the entry is closed or the sensor is reset, protection will begin instantly for the formerly affected circuit.

Anytime the security system triggers, the Status Light will indicate which protected zone triggered the system by flashing two (hood/trunk), three (door) or four (sensor) times between pauses. This "Zone Violation" code will continue to flash, even after disarming. The system can hold two different violation codes in its memory, which is cleared by turning the ignition switch "on". Once the system has been activated and reset, the disarming confirmation changes to make the user aware that it was activated.

How the controller reacts: Any 2-way controller programmed to the system will react to an alarm activation, provided it is within range of the system. Upon receiving a signal from the activated system, the controller will start chirping, and an icon will start flashing, indicating which protected zone's violation caused the system's alarm condition.

The controller will continue the chirping for 15 seconds, or until any of its

buttons are pressed. Which controller button that is pressed will have these corresponding effects upon the triggered system:

- Pressing “**arm/lock**” will rearm the system, stopping both system’s alarm condition (leaving it armed), and stop the controller’s chirping.
- Pressing “**disarm/unlock**” will disarm the system, leaving the doors locked, stopping both system’s alarm condition (leaving it disarmed) and the controller’s chirping. Pressing the button a second time unlocks the doors.
- Pressing and releasing any of the three other buttons will simply stop the controller’s chirping, but leave the security system still sounding in its alarm state.

The controller will continue to display the flashing icon indicating the violated zone, while the system is disarmed, until the ignition switch is turned on.

Prewarning Detection Circuit: When the sensor is triggered by a light impact or shock to the vehicle, the security system will respond by chirping the siren 3 times and locking the doors. After this Prewarning circuit has been triggered five times it will automatically shutdown until the alarm system is disarmed, then armed. If the controller was used to arm the system and prewarning occurs, if in range it will react by chirping 3 times and showing the “impact” starburst icon on its display.

Disarming the System

There are two methods of disarming the system:

- 1- The primary method is to use the **controller or transmitter** by pressing and releasing its “**disarm/unlock**” button. This is the normal “daily use” method.
- 2- The second method is an “**Emergency Override**” alternative, should the controller or transmitter become lost or inoperable. This method uses the Valet Switch, but the vehicle’s ignition key is also required.

Disarming the System Using the Controller or Transmitter

Press and release the controller or transmitter “disarm/unlock” button once to instantly disarm the system, disengage the starter interrupt and unlock the doors. If you have the optional unlock driver's door feature installed, then upon disarming only the driver's door will unlock, and if the “**disarm/unlock**” button is pressed again at anytime thereafter, all of the doors will unlock.

The system’s reaction: Disarming is confirmed by the siren chirping twice, the Status Light turning off, and the parking lights flashing twice, then with the interior lights illuminating for 30 seconds for approach illumination. The lights will turn off instantly if the ignition switch is turned "on" before the 30 seconds expires.

If the controller was used: It will confirm by chirping twice (or four times if the system was activated and reset), showing “DISARM” icon and “unlocked lock”,

and briefly showing the number of operating controllers or transmitters.

If the system was activated and reset itself: The disarming confirmation will no longer be 2 siren chirps, and the parking lights flashing twice before staying on with the interior lights. Instead, the system will respond with 4 siren chirps and the parking and interior lights flashing 4 times before staying on for 30 seconds. The Status Light will have changed to flashing two to four times between pauses as a “Zone Violation” code to indicate which protection circuit triggered the system (2 flashes, hood/trunk; 3 flashes, doors; 4 flashes, impact sensor). These special audible and visual disarming indications, and Zone Violation code, will remain this way until the ignition key is turned “on”.

Safety Disarm/Storm Mode: While the system is activated, i.e. sounding the siren and flashing the lights, pressing the “**disarm/unlock**” button will disarm the system, but not unlock the doors. This safety feature ensures that the vehicle remain secure should the system require disarming due to being activated from nuisance or malicious false sensory inputs, such as typically produced by severe weather conditions. To remotely unlock the doors if the system is disarmed while activated, simply repeat the disarm operation by pressing and releasing the “**disarm/unlock**” button again. If disarmed from a panic mode, the normal disarm indications are present, including the unlocking of the doors.

Automatic Rearming Feature: Automatic Rearming is a programmable feature which ensures that your system is never inadvertently disarmed. It is possible to accidentally or unknowingly operate the controller or transmitter from a pocket or purse. You may not even be aware of an accidental disarming due to the enhanced operating distance offered by the systems extended range, or if the controller confirmation is not noticed. Automatic Rearming has the alarm rearm itself 90 seconds after it has been disarmed, unless a vehicle door is opened or the ignition key turned on. Automatic Rearming is confirmed by a fast flashing Status Light after the disarming, unless the system was triggered, in which case a Zone Violation code will flash instead.

During the 90 second period, Automatic Rearming can be paused by opening the door or stopped completely by turning the ignition key "on". Also, Automatic Rearming can be cancelled by the Safety Disarm/Storm Mode feature; if the system is disarmed while triggered, Automatic Rearming will not occur.

Disarming the System by Emergency Override

Should the transmitter become lost, damaged, or its batteries become exhausted, the Valet Switch and the vehicle’s ignition key may be used to disarm the system:

Step 1 With the system in the armed condition, enter the vehicle via the driver's door (be aware that the alarm will trigger when the door is opened).

Step 2 Using the ignition key, turn the vehicle's ignition switch on.

Step 3 Within 5 seconds press and release the Valet Switch one time. The system will disarm.

The number of Valet Switch presses which are required for the Emergency Override is custom-programmable! This is the SecureCode feature, which is described on page 15 and page 26. **The above Emergency Override instructions reflect the “as received from the factory” default setting.**

Remote Panic Feature

Should you feel threatened, or the need to attract attention, you can activate your system's remote “Panic” feature at any time by pressing and holding for 3 seconds the controller or transmitter's “**arm/lock**”, the “**disarm/unlock**”, or optionally the “**III**” button (see programmable feature #21). Your system will respond by sounding the siren and flashing the parking lights for the normal activated alarm period of 30 seconds. Additionally, the system features an unique “enhanced” remote Panic operation, regarding additional operations during Panic, and in association with the transmitter button used in it's activation or deactivation:

- Activating Panic with the “**arm/lock**” button will lock the doors, arm the system and engage the starter interrupt.
- Activating it with the “**disarm/unlock**” button will unlock the doors, disarm the system and does not engage the starter interrupt.
- Activating Panic with the “**III**” button will not affect the system's armed or disarmed status; the doors locked or unlock condition; nor will it affect the starter disable circuit.

To disengage remote Panic, simply press and release any one of the same three transmitter buttons, or, allow it to automatically stop after 30 seconds.

- Deactivating Panic with the “**arm/lock**” button will stop Panic, and leave the system armed with the starter interrupt engaged, and the doors locked.
- Deactivating it with the “**disarm/unlock**” button will stop Panic, and leave the system disarmed with the starter interrupt disengaged, and the doors unlocked.
- Deactivating Panic with the “**III**” button will stop Panic, and leave the system in the same state it was in at the moment Panic started, without locking or unlocking the doors.
- If the system is allowed to reset itself from remote Panic, it will enter the armed state, locking the doors and engaging the starter interrupt, regardless of which of the three buttons was used to activate it.

Other Controller and Transmitter Operations

To **Silently Arm or Disarm** the alarm, press and release the “II” button twice. The siren’s confirmation chirps will not occur, and this operation simply reverses, or “toggles” the armed and disarmed status of the system.

The **sensor** may be **temporarily bypassed**. When arming the alarm with the controller or transmitter, within 3 seconds after the arming chirp press the “II” button. The system will respond with another single chirp, confirming that the sensor is bypassed.

The **2nd channel output**, which is operated by pressing and holding the controller or transmitter “II” button for 1 second, is designed specifically to operate your vehicle’s *electric* power trunk release. Your vehicle will respond by releasing the trunk lid or rear hatch, chirping the siren twice, turning on your parking and interior lights for 30 seconds, unlocking the doors, and disarming the system if it was armed. The 2nd channel output will not operate when the ignition switch is "on" unless the vehicle's door is open. If desired, the security system can be programmed to remain armed when this feature is used, and connection of the 2nd channel may require extra parts or installation.

The system also has a **3rd channel output** which is similar to the 2nd channel, but it does have some special operational design differences. To operate it, press and release the “III” button 2 times in 5 seconds to operate this output.

The differences are that 3rd channel output will operate regardless of the ignition switch being "on" or "off", and there is no audible or visual confirmation (except on the 2-way controller’s LCD display). Connection of the 3rd channel will vary, depending upon the chosen application, and may require extra parts or installation. Consult with your installer for more info.

There are also **optional 4th channel and 5th channel outputs**, which are available if more remote control functions are desired. These outputs can be repurposed from two other system outputs by programmable features #23 and #24. The system must be configured to utilize these outputs; please consult your installer.

When these outputs are programmed and configured to operate, pressing the transmitter or controller “**arm/lock**” and “II” buttons together will activate the 4th channel output. Pressing the “**disarm/unlock**” and “III” buttons will activate the 5th channel. Or, if desired, the controller or transmitter “III” button can be programmed by to operate either of these channels.

Using the Valet Switch

The Valet Switch is located in the Window Unit, or optionally, the installer may have instead mounted a separate Valet Switch in a hidden, yet accessible location. Please ensure that you and others who use your vehicle are aware of the location of the Valet Switch and its uses. The Valet Switch has several functions:

- Placing your system into **Valet Mode**, which prevents it from arming.
- Should your controller or transmitter be lost or become inoperable, the Valet Switch, **and the ignition key**, can be used to disarm the system with an **Emergency Override**. Disarming the System by Emergency Override is described on pages 11 and 12.
- It is also used in the procedures for programming features and programming controllers or transmitters to operate the system. See the “Programming sections of this manual for details on these uses.

Valet Mode: This allows you to turn off all of the “alarm” operations of the security system while retaining the remote convenience features such as keyless entry, Panic, and the Auxiliary Outputs. The system may only be placed into Valet Mode when it’s disarmed; if armed, an Emergency Override must be performed before placing into Valet Mode. Once the system is in Valet Mode, it cannot become armed from the transmitter, Last Door Arming, or Automatic Rearming.

Valet Mode and Emergency Override are two similar, but different procedures, although both operations use the Valet Switch. Emergency Override disarms an armed and activated system, and requires the ignition key. Valet Mode turns off the alarm operations of the *disarmed* system, but without the need of the ignition key.

Valet Mode is designed for situations in which it is not convenient for the security portion of the system to be operational, such as during extended stopovers for vehicle servicing, maintenance, valet parking, washing, etc.

To Enter Valet Mode: With the system disarmed, press and hold the Valet Switch for 2 seconds.

- The siren will chirp twice, the parking lights will flash twice and the Status Light will illuminate on solid.*
- To indicate that the system is in Valet Mode, the Status Light remains on whenever the system is in Valet Mode.
- To remind the user that the system is in Valet Mode, the siren will chirp once every time the vehicle’s ignition is turned off.

*A pair of red Status Lights are standard, mounted in the 2-way window unit transceiver; or, separately mounted red and blue Status Lights are available as optional equipment, which replaces the standard Status Light.

To Exit Valet Mode, simply Press & Release the Valet Switch at any time.

- The Status Light will turn off to confirm exit from Valet Mode.

To Enter/Exit Remote Valet: With the system disarmed and the door open, press LOCK, UNLOCK, LOCK on the controller/transmitter within 10 seconds.

- Confirmation is the same as normal Valet Mode.

SecureCode

“SecureCode” allows the user to customize the number of Valet Switch presses which are required to successfully perform an Emergency Override. **The basic Emergency Override procedure is described on pages 11-12.** Instead of a single “1 press” of the Valet Switch which would be required in order to perform an Emergency Override, two stages of Valet Switch presses must be made. In each of the two stages, the Valet Switch will need to be pressed 1 through 9 times, as programmed by the user. This is the Emergency Override procedure if the system has programmed with a customized SecureCode:

Step 1 With the system in the armed condition, enter the vehicle via the driver's door (be aware that the system will activate to an alarm condition when the door is opened).

Step 2 Using the ignition key, turn the vehicle's ignition switch on.

Step 3 Within 5 seconds press and release the Valet Switch the same number of times that have been programmed for stage #1.

Step 4 After a few seconds, the siren will stop sounding, chirp once, and then resume sounding.

Step 5 Now, within 5 seconds press and release the Valet Switch the same number of times that have been programmed for stage #2. Within a few seconds the siren will stop sounding, and the unit will disarm.

Once the system is disarmed, if Valet Mode is desired, just press and hold the Valet Switch for 2 seconds to place the system into Valet Mode.

Should a mistake be made entering the SecureCode for an Emergency Override, after a failed attempt the ignition switch must be turned off, then on again before another SecureCode entry attempt is made. **Should two failed SecureCode attempts be made, the system will ignore any further presses of the Valet Switch for two minutes.**

In addition to Emergency Override, if any of the three anti-carjacking features are utilized, a correct customized SecureCode would also be required to turn off anti-carjacking once it has become fully activated. How to program your own customized SecureCode is explained on pages 26.

The Status Light

The Status Light visually confirms the status of the system and provides a high level of visual deterrence. The Status Light is in the window unit, and actually consists of two LED lights, with identical operation, for maximum visibility. These lights illuminate Red in color, but separately mountable Status Lights are available, in either Red or Blue color. So whereas the standard Status Light is described as Red, other colors may be found.

Security System Status: These are the “normal” operations of the Status Light, indicating the state of the security system. Exceptions to normal operation are the transmitter verification display upon turning on the ignition key, and

- 1) Off = The security system is disarmed and not performing automatic functions.
- 2) On Constant = The security system is in the Valet Mode.
- 3) Flashing Slowly = The security system is fully armed.
- 4) Flashing Fast = Last Door Arming or Automatic Rearming is in progress.

Automatic Transmitter Verification: For the first 10 seconds after the vehicle's ignition is turned on, the Status Light will flash a number of times between pauses that equal the number of controllers or transmitters that are programmed to operate the system:

- 5) 1 Flash /pause = 1 controller or transmitter is programmed.
- 6) 2 Flashes /pause = 2 controllers or transmitters are programmed.
- 7) 3 Flashes /pause = 3 controllers or transmitters are programmed.
- 8) 4 Flashes /pause = 4 controllers or transmitters are programmed.

Zone Violation: If the system enters an alarm condition, the Status Light will stop flashing slowly and begin to flash in a sequence between pauses to indicate which protected zone caused the alarm condition. The Status Light will flash and pause to indicate which protected zone was violated while the system is still armed, after it is disarmed, and until the vehicle's ignition is turned on. The system's Zone Violation feature's memory can store two consecutive zone violations. If there have been multiple violations, the Status Light will show the two most recent violations in the order in which they occurred.

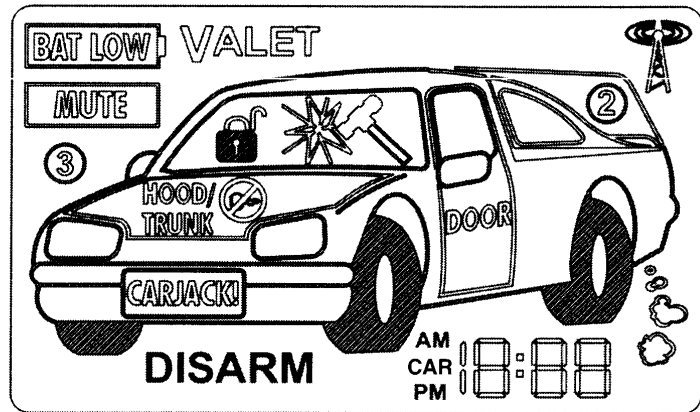
- 9) 2 Flashes / Pause = System was triggered by open hood or trunk.
 - 10) 3 Flashes / Pause = System was triggered by an open door.
 - 11) 4 Flashes / Pause = System was triggered by the sensor.
- Turning on the ignition will clear the Zone Violation.

The 2-Way Controller

The four system- operating buttons are described on pages 4-7. This section explains the controller's icons, and how to program the controller's features.

Controller Icons: The LCD screen on the controller has various icons which indicate system status. When the controller is used to operate the system, it receives back a signal which causes it to chirp (emulating the siren) and display the appropriate icons. Brief descriptions of the icons are:

- The digit readout is a clock, with AM and PM indication. This readout also shows how which vehicle is selected (1 or 2) and is used for the timer functions (page 20).



- The “DISARM” also shows “ARM”; to indicate the Armed or Disarmed status of the system. Neither icon is present when the system is in Valet Mode.
- The locked or unlocked padlock (windshield) reflects the locked or unlocked doors status as last operated by the system (certain programmable features can automatically arm the system, but not lock the doors). Arming with the controller or transmitter always locks the doors; when disarming they will unlock unless the system is activated and sounding.
- “VALET” indicates alarm Valet Mode, replacing the “ARM” or “DISARM” icons. A musical tone occurs when placing the system into Valet Mode.
- When “BAT LOW” appears the transceiver's 1.5 volt AAA battery should be replaced with a new battery.
- The controller's chirps and musical tones may be turned off, which makes the unit vibrate instead; “MUTE” indicates this state.
- The “3” within a circle appears when the 3rd Channel Output is operated.
- “HOOD/TRUNK” indicates that this vehicle zone is or has been violated. If associated with the system being activated, the controller also emits chirps, until any button is pressed. In this case, the icon remains flashing until the ignition switch is turned on.
- The “crossed-out key” icon, on the hood area, only appears when the controller is used with systems having built-in remote starting. This icon indicates an aborted remote starting due to a violated safety circuit. The system can

be used with an optional remote starting unit; the remote “start” icon (below) will operate, but not this icon.

- The “CARJACK” icon within the vehicle’s front tag frame indicates that this operation has been activated, which can be performed by any of three methods.
- On the vehicle’s windshield is a “hammer” and “impact” icon. When the shock sensor detects light impact, causing the system to prewarn, the “impact” icon alone will momentarily appear, accompanied by three chirps. If the sensor detects a harder impact or breaking glass, activating the system, the full hammer and impact icon appears, and the controller chirps until any button is pressed, and the icon remains flashing until the ignition switch is turned on.
- The “DOOR” icon will indicate that the system was activated via the door detection circuit. The controller chirps until any button is pressed, and the icon remains flashing until the ignition is turned on.
- If an optional remote start unit is added to the system, the “start” icon at the rear of the vehicle can confirm remote starting, and it is accompanied by a musical melody. The 3rd channel must be operated first, and then if the system detects that the ignition circuit is turned on it will display this icon.
- The “2” within a circle indicates use of the 2nd Channel Output, which is most commonly used for a remote trunk release feature.
- The “transmitting tower” icon is an in-range indicator. It is present if the last transmission by the controller was answered by a return signal from the system. Should the controller be operated, and no return signal is received, this icon will disappear.
- The various lines at the upper rear of the vehicle graphic represent a unique feature which allows the user to customize the vehicle type represented by the display. Options are: passenger car, pickup truck, and sport utility/van.
- The system will only transmit a signal to the controller if it was last used to operate the system (as in arming or disarming it). Example: if the 1-way transmitter is used to arm the alarm, the system will not transmit a signal which will cause the 2-way controller to chirp and change its icons.

Notes about the Controller and its operation:

- If multiple controllers are programmed to operate the system, the system will immediately send a page signal to the last one used. It will send the same signal to additional controllers within 10 seconds of the first.
- When the system does send a signal to the controller, a few seconds is needed for this wireless “handshake” to occur. If the system is operated in a

rapid fashion, as in quickly repeating arm and disarm cycles, the controller will not have time to receive the signal from the system, and therefore it will stop responding and reporting the system's status. Normally operating the system corrects this symptom.

- A final point to remember is that the controller cannot receive a signal from the system while it itself is transmitting. For normal operations, the controller's buttons are pressed and released. Even when "Panic" is operated, the controller button should be released as soon as "Panic" engages. Otherwise, the controller cannot receive the signal from the system.

Programming the Controller:

The 2-way controller has several user-programmable features:

- **Chirp or Mute** The chirps may be turned off, and replaced with vibration.
- **Vehicle Type** Choices are a passenger car, pickup truck, or van/SUV. This can be selected separately for CAR1 and CAR2 profiles.
- **Time Adjust** To set the controller's clock time.
- **Start Melody; and Stop Melody** These are played with remote starting.

Programming these features is a sequential process- the controller is placed into programming mode, then each programmable operation is accessed in turn, and either changed as desired, or left as is, and then the next step is accessed. Programming is done using the Echo unit's three round side buttons:

1) Press and hold the "P" button AND:

A- Choose **Chirp or Mute** by pressing the ":" button for 1 second.

OR

B- Continue holding this button for 5 seconds to enter programming mode.

2) After 5 seconds the controller chirps twice; release the "P" button; the upper rear of the vehicle will flash; **Vehicle Type** may be chosen.

3) Press and release the ":" button; each press of the button changes the vehicle from Passenger Car, then to Pickup Truck, and then to Van/SUV. When the desired type is flashing, **press and release the "P" button;** the **Time's "Hours"** will flash, and may be set now.

4) Press and release the ":" button to advance the hours, or **press and release the ":" button** to reverse the hours. When the Hours are correct (please note "AM" or "PM"), **press and release the "P" button.** The **Time's "Minutes"** will flash, and may be set now.

5) Press and release the ":" button to advance the minutes or **press and release the ":" button** to reverse the minutes. When the minutes are correct **press and release the "P" button.** The controller will play a musical melody; this is the **Start Melody** which plays upon remote starting. One of five melodies may be chosen now.

6) **Press and release the “:” button.** Each press of the button changes to the next melody, note that the LCD screen displays “S” and a numeral, which is the melody number. When the desired musical tone has been the last one played **press and release the “P” button.**

7) The controller will play another musical melody; this is the **Stop Melody** which plays when remote start engine run period ends. There are five different melody choices which can be made. **Press and release the “:” button** . Each press of the button changes to the next melody, note that the LCD screen displays a numeral, which is the melody number. When the desired musical tone has been the last one played, you may

leave the controller undisturbed for 12 seconds, until it chirps once
OR
press and release the “P” button to scroll back through the features.

- While the controller programming must be “scrolled” through, programming mode can be exited at any point within the menu by simply not pressing any buttons for 12 seconds. The Echo chirps once when it exits programming mode.
- If the Echo is configured for “MUTE” operation (vibrates instead chirping), then in programming it will not play the musical melodies. Instead, it vibrates when the remote start Melody and Stop Melody are accessed for programming.

Timer Functions: The ECHO 2-way controller has 2 timer functions. A parking timer for timing how long you’ve parked in a limited parking zone or at a parking meter. Also, if this system is used to activate an optional remote start system, the controller has a remote start timer to keep track of how long the vehicle’s engine has been running.

Parking Timer: Press the “**LOCK**” button twice within 5 seconds to activate. The digital clock display will change to “0:00” to indicate the timer has started. The timer is in hours/minutes format and can be canceled by pressing the “**UNLOCK**” button. Press the “P” button during the timer to see the clock display. It will display for 5 seconds then return to the timer.

Remote Start Timer: Using the 3rd channel output to activate a remote start system will automatically start the timer. The digital clock display will change to “0:00” to indicate the timer has started. The timer is in hours/minutes format and can be canceled by deactivating the remote start system. Press the “P” button during the timer to see the clock display. It will display for 5 seconds then return to the timer.

Multi-Vehicle Operation: The ECHO 2-way controller is capable of operating up to 2 separate systems in separate vehicles. This is indicated by seeing “CAR1” or “CAR2” in place of the clock display. Select “CAR1” by pressing “LOCK” and “P” for 1 second. Select “CAR2” by pressing “UNLOCK” and “P” for 1 second. Every alert to the controller will also indicate which “CAR” sent the alert.

Anti-Carjacking Protection

The system is equipped with three separate Anti-Carjacking protection features, whose operation may be selectively activated by the ignition, by an open door, or by the transmitter. All three are programmable, and must be turned on to operate. Once activated, the user has 53 seconds to cancel the Anti-Carjacking protection process by pressing the Valet Switch once. If Anti-Carjacking is not cancelled, 53 seconds after being activated the siren will begin to chirp for 7 seconds to alert the user that the system is about to enter into an alarm condition. The Valet Switch may still be pressed once during this period to cancel the Anti-Carjacking process.

If the Anti-Carjacking process is not cancelled before the 60 second count-down expires, the system will enter an alarm condition, sounding the siren and flashing the parking lights. 30 seconds after this occurs, or should the ignition be turned off in the meantime, the stater interrupt will engage. Once the system enters the alarm condition, it will not respond to the transmitter, nor will the system reset automatically after 60 seconds, and it can only be disengaged by:

Step 1 Turning the vehicle's ignition off.

Step 2 Turning the ignition back on.

Step 3 Within 5 seconds, perform an Emergency Override using the Valet Switch. If the SecureCode has been customized, the correct number of Valet Switch presses must be made.

The three types of Anti-Carjacking protection features are:

Anti-Carjacking protection activated by the vehicle's ignition has the process start every time the vehicle's ignition is turned on. The Valet Switch must be pressed within 60 seconds every time the vehicle is started to cancel Anti-Carjacking. This is User Programmable Feature #17 (see page 31).

Anti-Carjacking protection activated by an open door has the process start should a door be opened after the vehicle is started and the engine is running. The Valet Switch must be pressed within 60 seconds after the door is opened to cancel Anti-Carjacking. This is User Programmable Feature #18 (see page 32).

Anti-Carjacking protection activated using a controller or transmitter has the process start by pressing and holding the "III" button for 3 seconds, but only if the vehicle's ignition is on. The Valet Switch must be pressed within 60 seconds after this is done to cancel Anti-Carjacking. This is User Programmable Feature #19 (see page 32).

Controller and Transmitter Protection

The system features several security safeguards in one of the most vulnerable areas of any remotely controlled system. These features are found in both 2-way controllers and 1-way transmitters.

Code Jumping™ It is quite easy, with the proper equipment, to record an alarm or keyless entry system's transmitter signal, and simply play the captured signal back to the system to defeat it. The systems Code Jumping renders such "code grabbing" devices useless by randomly changing each signal that the controller or transmitter sends.

Automatic Transmitter Verification™ shows the total number of controllers and/or transmitters which can operate the system, by flashing the Status Light with this number for 10 seconds every time that the ignition key is turned on.

Unauthorized Transmitter Alert™ is a protection feature which may be turned on by the user (see the next section, "How to Program Controllers and Transmitters"). When this protection feature is utilized, whenever a controller or transmitter is added to operate the system, for 48 hours afterward a warning consisting of a brief series of siren chirps sounds every time the vehicle's ignition is turned on.

Also during this 48 hour warning period, the 10 second Automatic Transmitter Verification visual display will increase to being displayed for 90 seconds instead of 10 seconds. When this feature is used and activated, after 48 hours the warning chirps disappear and the Status Light flashing transmitter/controller number returns to being displayed for 10 seconds.

How to Program Controllers or Transmitters

The system is capable of being operated by as many as four controllers or transmitters; these can be any combination of 1-way transmitters or 2-way controllers. Regardless of which, the transmitter or transceiver must be encoded, or programmed, to the system in order to operate it (excepting the originals, which were programmed at the factory).

The programming procedure is identical for a transmitter or for a controller. Also, it is during the controller/transmitter programming procedure that the Unauthorized Transmitter Alert feature may be turned on.

Standard Programming: Using this method to program additional or replacement controllers or transmitters does not affect Unauthorized Transmitter Alert.

Step 1 Have all controllers and/or transmitters which are to operate the system at hand. Turn the ignition "on".

Step 2 Within 5 seconds of turning on the ignition, press the Valet Switch 5 times. The siren will briefly sound, confirming that for the next 10 seconds the system is ready to learn a controller/transmitter code. To enter a code, simply press and release the “**arm/lock**” button (the button which is designed to arm the system). **When the first controller/transmitter code is learned all existing stored codes will be erased.**

Step 3 Press the “**arm/lock**” button on each remaining controller or transmitter. The system will chirp the siren once to confirm that each was learned. The controller or transmitter’s other three button's functions will automatically be assigned when the “**arm/lock**” button is learned. If a code is not received within a 10 second period, the learning process will automatically terminate, as indicated by another siren burst.

If the Unauthorized Transmitter Alert feature is on, programming a controller or transmitter to the system will activate the Unauthorized Transmitter Alert warning and the extended Status Light visual display; for the next 48 hours the siren will sound a brief series of chirps every time the vehicle’s ignition key is turned on. The following special procedure programs the controllers/transmitters and also turns the Unauthorized Transmitter Alert feature on.

Special Programming procedure to turn On the UTA feature: Use this method to program controllers or transmitters, and to turn on the Unauthorized Transmitter Alert feature.

Follow the same steps as the Standard Programming, but on any controller/transmitter being programmed instead of pressing the “**arm/lock**” button, press the “**arm/lock**” and the “**disarm/unlock**” buttons together. This action turns **on** the Unauthorized Transmitter Alert feature and at the same time programs the controller/transmitter to operate the system.

Once the Unauthorized Transmitter Alert feature is turned on, the warning will sound for 48 hours after any controller or transmitter programming, including the programming session which was used to turn it on. **NOTE: Once UTA is turned on, it cannot be turned off unless sent back to Omega for a factory reset.**

It is important to note that programmable features affect the exact operation of the system, and that the descriptions of any features utilized should be used to supplement the basic system operations which were described in previous sections of this booklet.

Each of the Programmable Features is described in detail in the pages following the features' list and programming instructions.

The Programmable Features

The Crime Guard 750i⁶'s versatility is due to an incredible array of programmable features. These are:

- 1 SecureCode
- 2 Last Door Arming
- 3 Automatic Rearming
- 4 Starter Interrupt Functions
- 5 Ignition Activated Override
- 6 Doors Lock With Ignition On
- 7 Doors Unlock With Ignition Off
- 8 Open Door Bypass To Previous Two Features
- 9 Confirmation Chirps
- 10 Confirmation Chirp Volume
- 11 Activated Alarm Cycle
- 12 Lights On Upon Disarm
- 13 Disarm Alarm Upon Trunk Release
- 14 Arming Delay
- 15 Steady Siren Output / Pulsed Horn
- 16 Alarm Functions Bypass
- 17 Ignition Activated Anti-Carjacking Protection
- 18 Door Activated Anti-Carjacking Protection
- 19 Remote Activated Anti-Carjacking Protection
- 20 Open Door Warning Upon Arming
- 21 Ill Button Operation
- 22 Doorlock Functions (an installation feature)
- 23 Lock Relay Functions (an installation feature)
- 24 Unlock Relay Functions (an installation feature)

“Features Programming Mode” is the means for changing any of the features.

How to Program Features

The vehicle ignition key and the Valet Switch are used to enter the Programming Mode, then the controller or transmitter is used to change features. Once the system is in Programming Mode, a 10 second period without programming activity will cause the system to automatically exit Programming Mode. Features can be selected in any order as desired.

Enter Programming mode:

- | | |
|---------------|---|
| Step 1 | Turn the vehicles's ignition on. |
| Step 2 | Turn the ignition off. |
| Step 3 | <p><u>Within 5 seconds</u>, Press & Release the Valet Switch 5 times.</p> <ul style="list-style-type: none">• The siren will chirp then sound briefly and the Status Light will light steady to confirm that the system is entering Programing Mode. |

Access a Feature:

- | | |
|---------------|--|
| Step 4 | <p><u>Within 10 seconds</u>, Press & Release the Valet Switch the same number of times as the desired feature's number.</p> <ul style="list-style-type: none">• The siren will chirp and the Status Light will flash off the same number of times as the Valet Switch was pressed to indicate the feature number accessed. |
|---------------|--|

Change the Feature:

- | | |
|---------------|--|
| Step 5 | <p>After accessing the desired feature, <u>within 10 seconds</u> Press & Release the appropriate controller or transmitter button.</p> <ul style="list-style-type: none">• Pressing the “arm/lock” button typically turns the feature on; or sets the feature's first option. The siren will chirp once when this button is pressed.• Pressing the “disarm/unlock” button also typically turns the feature off; or, sets the feature's second option. The siren will chirp twice.• Many features have third, and even fourth setting options. Pressing the “II” and “III” buttons select these options. Confirmation chirps when these buttons are pressed are three and four chirps respectively. |
|---------------|--|

To Access and Change further Features:

- | | |
|---------------|---|
| Step 6 | <p>If there are more features to be programmed, <u>within 10 seconds</u> of the previous action Press & Release the Valet Switch the same number of times as the next desired feature's number.</p> <ul style="list-style-type: none">• Again the siren will chirp and the Status Light will flash as many times as the Valet Switch was pressed to indicate the new feature number which is now accessed. Then use the controller or transmitter as described in Step 5 to change the newly accessed feature as desired. |
|---------------|---|

Exit Programming mode:

- Step 7**
- Allow 10 seconds to pass without performing any programming actions, or turn the vehicle's ignition on.
- The siren will sound briefly and the Status Light will go out.

Programmable Features Descriptions

Feature #1 SecureCode

Factory Default Setting **1 Press**

Options:

1 to 9 presses, in each of two stages

SecureCode is a unique patented feature which allows you to custom select the number of Valet Switch presses in two stages, instead of a single “1 press”, which would be required in order to perform an Emergency Override. If any of the three anti-carjacking features are utilized, a customized SecureCode would also be required to turn it off once it is fully activated. The SecureCode operation is described on page 15.

To custom program a new SecureCode:

- Step 1** Follow Steps 1 to 4 in the previous “How to Program Features” instructions; at Step 4 the Valet Switch will be pressed and released once (the siren chirps once) to access “feature #1”.
- Step 2** Within 10 seconds slowly press and release the controller or transmitter's “**arm/lock**” button the number of times equal to the desired SecureCode for stage 1, allow the system to respond to each controller/transmitter button press with a siren chirp before pressing the button again.
- Step 3** After entering the first stage by pressing the “**arm/lock**” button the desired number of times, and receiving a chirp for each press, wait for the system, after the final button press, to chirp the siren again the total number of times that the button was pressed.
- Step 4** Continue to configure stage 2 of the SecureCode by now pressing and releasing the “**disarm/unlock**” button the number of times desired for the stage 2. This should be done in the exact same fashion as the stage 1 entry-press the “**disarm/unlock**” button, wait for a single chirp before pressing the button again, and then when final button press is done, wait after the single chirp for the siren to chirp the total number you entered via the Valet Switch.

Feature #2 Last Door Arming

Factory Default Setting

Off

(press “**arm/lock**” button to program)

Options:

On without doors locking (press “**disarm/unlock**” button to program)

On with doors locking (press “**II**” button to program)

“Last Door Arming” has the system automatically arm itself every time you exit the vehicle (the complete operation is described on pages 8 & 9). This feature turns that operation on or off, and with options of having Last Door Arming operate with or without also locking the doors when the system does arm.

Feature #3 Automatic Rearming

Factory Default Setting

Off

(press “**arm/lock**” button to program)

Options:

On without doors locking (press “**disarm/unlock**” button to program)

On with doors locking (press “**II**” button to program)

“Automatic Rearming”, described on page 11, prevents the system from becoming accidentally disarmed by having it arm itself after being disarmed, if a door is not then opened or the ignition turned on. Options are to have Automatic Rearming operate with or without also locking the doors when the system does rearm.

Feature #4 Starter Interrupt Functions

Factory Default Setting

On

(press “**arm/lock**” button to program)

Options:

Off (press “**disarm/unlock**” button to program)

Automatic (press “**II**” button to program)

This feature controls the Starter Interrupt circuit, in several ways. In its default setting, “On”, the Starter Interrupt is operable whenever the alarm is armed.

The “Automatic” option will cause the Starter Interrupt output to automatically engage 90 seconds after the ignition switch is turned “off”, and also 90 seconds after disarming the system. This automatic engagement will occur even if the security system is in a disarmed state, but not if it is in Valet Mode. Once the Starter Interrupt output is activated, the system must be armed, then disarmed with the controller or transmitter, or placed into the Valet Mode by pressing and holding the Valet Switch for 2 seconds to disengage it. There are no Status Light indications with this automatic form of Starter Interrupt.

Programming this feature “Off” completely eliminates the Starter Interrupt output, while leaving all other system operations fully functional.

Feature #5 Ignition Activated Override

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

This feature allows an activated system to be overridden and disarmed by simply turning the ignition switch on within 10 seconds of the system’s activation. After 10 seconds, the Emergency Override must be performed or the controller or transmitter “**disarm/unlock**” button can be used to disarm the system.

Feature #6 Doors Lock With Ignition On

Factory Default Setting **On** (press “**arm/lock**” button to program)

Option: **Off** (press “**disarm/unlock**” button to program)

This feature configures the system to automatically lock the vehicle’s doors every time that the ignition switch is turned on. An exception to this would be if feature #8 is turned on, and a door being open when the ignition switch is turned on. The following feature #7 controls the automatic unlocking operations, and feature #8 provides for an override of this automatic locking if a door is open when the ignition is turned on.

Feature #7 Doors Unlock With Ignition Off

Factory Default Setting **On (all doors will unlock)***
(press “**III**” button to program)

Options:

Off (press “**arm/lock**” button to program)

Driver’s Door Only* (press “**disarm/unlock**” button to program)

All Doors Except Driver’s Door* (press “**II**” button to program)

Similar to the previous locking feature, except this feature controls the unlock operations when the ignition is turned off, and it has more options because of the systems multiple unlocking outputs.

*Multiple unlock outputs offer the capability of unlocking only the driver’s door when the system is disarmed (Driver Door Priority Unlocking), and then the option of unlocking all doors with a second press of the “**disarm/unlock**” button. **The driver’s door unlocking differently from the other doors must be configured when the system is installed!**

If the system is installed without the Driver’s Door Priority Unlocking interface, this feature unlocks all of the doors when the ignition switch is turned off. If Driver’s Door Priority Unlocking is installed, this feature can control only the driver’s door unlocking when the ignition is turned off, all doors unlocking, or all doors except the driver’s. The following feature provides for an override of this automatic unlocking if a door is open when the ignition is turned off.

Feature #8 Open Door Bypass of Ignition Locking

Factory Default Setting **On** (press “**arm/lock**” button to program)

Option: **Off** (press “**disarm/unlock**” button to program)

This feature cancels the automatic locking or unlocking of the vehicle’s doors should one of the doors be open when the ignition switch is turned on or off.

Feature #9 Confirmation Chirps

Factory Default Setting **On**
(press “**arm/lock**” button to program)

Options:

Off (press “**disarm/unlock**” button to program)

Chirps Excepting Valet Mode (press “**II**” button to program)

Chirps in Valet Mode Only (press “**III**” button to program)

This feature removes the system’s 1 arming and 2 disarming confirmation chirps. When this feature is used to remove these chirps, the system will still have 3 chirps upon arming if a protected zone is violated, and still have 4 chirps upon disarming if the system was previously activated. Using this feature to turn off the arm and disarming chirps will also not affect the Prewarning operation, Unauthorized Transmitter Alert (if used), nor will it affect the chirps used when programming.

The other two settings will have the confirmation chirps operate only when the system is in Valet Mode, and not otherwise; or, the chirps will operate except when the system is in Valet Mode.

Feature #10 Confirmation Chirp Volume

Factory Default Setting **Medium High**
(press “**II**” button to program)

Options:

Low (softest) (press “**arm/lock**” button to program)

Medium Low (press “**disarm/unlock**” button to program)

High (loudest) (press “**III**” button to program)

This feature allows the choice of four different volume levels of the system’s confirmation chirps, and when programming it, the buttons can be repeatedly and sequentially pressed, thus making it easy to hear and choose the setting with the best chirp volume.

This feature operates regardless of how feature #15, “Steady Siren” or “Pulsed Horn” is set. Feature #15 sets “Steady”; or “Pulsed” as three different timings, for the activated alarm period output. This feature, #10, affects only the confirmation chirps.

Feature #11 Alarm Duration

Factory Default Setting **30 Seconds**

(press “**arm/lock**” button to program)

Options:

60 Seconds (press “**disarm/unlock**” button to program)

90 Seconds (press “**II**” button to program)

120 Seconds (press “**III**” button to program)

This feature allows four choices of the Alarm Duration, which is the period of time for which the system sounding the siren (and/or horn, optionally) and flashes the parking lights when it is triggered. **Caution: Before lengthening the Alarm Duration you should always check and determine if there are any local anti-noise or nuisance ordinances in your area, to avoid the possibility of receiving a violation citation.**

Feature #12 Parking Light Illumination Upon Disarm

Factory Default Setting **On** (press “**arm/lock**” button to program)

Option: **Off** (press “**disarm/unlock**” button to program)

This feature affects the parking light operation when the system is disarmed. When this feature is turned on, the parking lights flash once, and then turn back on for external illumination for 30 seconds unless the ignition key is turned on during that time. If this feature is turned off, the parking lights flash once only, and do not illuminate. This feature only affects the system’s parking light operation, and not the interior light operation.

Feature #13 2nd Channel Also Disarms System

Factory Default Setting **On** (press “**arm/lock**” button to program)

Option: **Off** (press “**disarm/unlock**” button to program)

“2nd channel” is most commonly used to remotely open the vehicle’s trunk, in which case the alarm should also disarm. This feature, turned on, configures the system to disarm when the 2nd channel is used. If turned off, the 2nd channel output will still occur, without chirps or parking light flashes; and if armed, the system will not disarm.

Feature #14 3 or 45 Second Arming Delay

Factory Default Setting **3 Seconds**

(press “**arm/lock**” button to program)

Options:

15 Seconds (press “**disarm/unlock**” button to program)

30 Seconds (press “**II**” button to program)

45 Seconds (press “**III**” button to program)

When the system is armed, whether by the controller, transmitter or by an automatic

there is a brief period of time in which a system activation, or alarm, cannot occur. This Arming Delay allows the system to completely process its sensory parameters, which can include allowing the vehicle to stabilize. In some cases more time is needed than the factory-set 3 seconds, and this feature offers three longer delay options.

Feature #15 Steady Siren or Pulsed Horn

Factory Default Setting

Steady Siren

(press “**arm/lock**” button to program)

Options:

Pulsed Horn Low

(press “**disarm/unlock**” button to program)

Pulsed Horn Medium

(press “**II**” button to program)

Pulsed Horn High

(press “**III**” button to program)

It is important to understand that the Excalibur has a primary audible output, for the electronic siren; and that it also has a programmable output used to sound the vehicle’s existing horn. This feature changes only the primary audible output, so that it can be utilized to sound the existing horn by itself. This is for cases when the programmable output is desired for other features, such as OEM disarm, or as an additional auxiliary output.

The Steady Siren setting is exactly that- a steady output which the electronic siren requires. When programming this feature for using the output for the vehicle’s horn, the optional setting produce pulsed output on the system’s siren wire, in three different pulse timings, which allow a degree of customization of the horn’s sound during the alarm activation.

Feature #16 Alarm Functions Bypass

Factory Default Setting

Off

(press “**disarm/unlock**” button to program)

Option:

On

(press “**arm/lock**” button to program)

This feature converts the system into a strictly Remote Keyless Entry System by eliminating all antitheft alarm-oriented operations and features. When this feature is programmed on, the Excalibur has remote keyless entry operation only.

Feature #17 Ignition Activated Anti-Carjacking Protection

Factory Default Setting

Off

(press “**disarm/unlock**” button to program)

Option:

On

(press “**arm/lock**” button to program)

This form of Anti-Carjacking is initiated by the ignition key being turned on. The Anti-Carjacking protection, and the three ways to initiate it are described on page 21.

Feature #18 Door Activated Anti-Carjacking Protection

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

This form of Anti-Carjacking is initiated by a door being opened. The Anti-Carjacking protection, including the three ways to initiate it are described on page 21.

Feature #19 Remote Activated Anti-Carjacking Protection

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

This form of Anti-Carjacking is initiated by a signal from the controller or transmitter. The Anti-Carjacking protection, including the three ways to initiate it are described on page 21.

Feature #20 Open Door Warning Upon Arming

Factory Default Setting **Off** (press “**disarm/unlock**” button to program)

Option: **On** (press “**arm/lock**” button to program)

When this feature is turned on, if one of the vehicle's doors is open at the time that the system is armed via the controller or transmitter, the siren will chirp 3 times and the parking lights will flash 3 times instead of once.

Feature #21 “III” Button Operation

Factory Default Setting **3rd Channel**
(press “**arm/lock**” button to program)

Options:

Panic (press “**disarm/unlock**” button to program)

4th Channel (press “**II**” button to program)

5th Channel (press “**III**” button to program)

This feature changes how the controller's or transmitter's “**III**” button operates. Normal operation, or the default setting, has the “**III**” button operate the 3rd channel output. This feature allows changing it to instead operate the panic function or either of the two other optional channel outputs should a dedicated one-button operation be desired for any of these functions. Panic can always be operated, by the alternative methods of pressing either the “**arm/lock**” and “**disarm/unlock**” button for 3 seconds. This feature can also assign the 4th and 5th channels to the “**III**” button, in the same manner as the 3rd channel.

The final 3 Programmable Features are for the installer's use.

These features are described to explain their function; as these features are dependent upon the installation configuration within the vehicle, they should not be changed except by the original dealer or qualified installer.

Feature #22 Doorlocking Functions (installer feature)

Factory Default Setting .8 Second Lock & Unlock Output
(press “**arm/lock**” button to program)

Options:

3 Second Lock & Unlock Output (press “**disarm/unlock**” button to program)

Double Pulse Unlock Output (press “**II**” button to program)

Total Closure Lock Output (press “**III**” button to program)

This single feature gives the **installer** several needed options, to match the security system's doorlocking outputs to suite different vehicle requirements.

- The first setting (programmed by the “**arm/lock**” button) has the system produce both the lock and unlock outputs as .8 second in duration. This is the most common form of output needed, which interfaces most vehicles.
- The second setting (programmed by the “**disarm/unlock**” button) changes the lock and unlock outputs to be a longer 3 second pulse output. This is for certain vehicles which require a longer output pulse, typically cars having pneumatic doorlocking systems, although the longer setting is also more suitable in some newer-model vehicles.
- Some newer vehicles require a double pulse output to remotely unlock the doors and/or to disarm a factory-equipped security system, which is what the Double Pulse Unlock setting provides (it is programmed by the “**II**” button).
- The Total Closure Lock Output (programmed by the “**III**” button) may be used with vehicles which are originally equipped with the total-closure feature. Typically, a total closure feature is when locking the vehicle's doors if the key in the door is held to “lock” for a period of time the vehicle will close all windows and the sunroof, in addition to locking the doors.

Note: When this feature is turned on, during the 28 second period after arming the system, the lock output can be stopped on demand by the user by pressing the “**arm/lock**” OR the “**disarm/unlock**” button. Only the output itself will stop- pressing either button again will normally operate the system, and at any time after the 28 second lock output period ends.

The following two features, when they are set for factory alarm “arm” or “disarm” output operation, will follow the setting of this feature.

The final 3 Programmable Features are for the installer's use.

Note: Features #23 and #24 involve two outputs of the Crime Guard control unit which give the installer greater flexibility. These outputs can be programmed to perform several different functions and they must be configured by the installer to perform the desired operations.

Feature #23 Lock Relay Functions

Factory Default Setting **Door Lock Output**
(press “**arm/lock**” button to program)

Options:

Parking Light Output (press “**disarm/unlock**” button to program)

Channel 4 Latch Output (press “**II**” button to program)

Channel 4 On Demand Output (press “**III**” button to program)

The Crime Guard 650i⁵ has two built-in relays, which can be programmed to perform several different functions. Although the primary function, or default setting, of this relay is to operate as a door “lock” function, there are many vehicles which don’t actually require a relay in which case the relay is available for the optional functions. Other options for this relay are parking light flash, and an additional remote output, operated by the transmitter’s “**arm/lock**” and “**II**” **buttons** together, and in two forms: “Latch”, in which the output toggles with each buttons press, and “On Demand” which is output while the buttons are being pressed. Feature #21 can change this channel’s button assignment.

Feature #24 Unlock Relay Functions

Factory Default Setting **Door Unlock Output**
(press “**arm/lock**” button to program)

Options:

Horn Output (press “**disarm/unlock**” button to program)

Channel 5 Latch Output (press “**II**” button to program)

Channel 5 On Demand Output (press “**III**” button to program)

This is the second of two built-in relays which can be programmed to perform several different functions. As described above for the “lock” relay, the primary function of this second relay is the “unlock” function, which in many cases is not required and making the relay available for other uses. In the case of this relay, a very popular application is operating the vehicle’s existing horn; either in conjunction with the electronic siren, or in place of the siren. Using both the siren and the horn creates an extremely effective security system. The remaining options are Channel 5, with the same operation parameters as described above for Channel 4, except that the “**disarm/unlock**” and “**III**” buttons operate it.

Complete Programmable Features Matrix

Features		Ignition on, off, then press Valet Switch 5 times (Status Light turns on steady).			
#	Feature	Default Setting	Option	2nd Option	3rd Option
1	SecureCode	1 & 0	2 stages, of up to 9 presses each (total of 99 possible combinations)		
2	Last Door Arming	OFF (L)	ON w/o doorlock (U)	ON w/ doorlock (2)	
3	Automatic Rearming	OFF (L)	ON w/o doorlock (U)	ON w/ doorlock (2)	
4	Starter Interrupt Functions	Alarm only (L)	Off (U)	Automatic (2)	
5	Ignition Activated Override	OFF (U)	ON (L)		
6	Doors Lock With Ignition On	ON (L)	OFF (U)		
7	Doors Unlock With Ignition Off	ON (3)	OFF (L)	o/p 1 only (U)	o/p 2 only (2)
8	Open Door Bypass to above	ON (L)	OFF (U)		
9	Confirmation Chirps	ON (L)	OFF (U)	exc. Valet (2)	Valet only (3)
10	Confirmation Chirp Volume	Medium Loud (2)	Low (L)	Med Lo (U)	Loud (3)
11	Activated Alarm Cycle	30 Seconds (L)	60 Sec. (U)	90 Sec. (2)	120 Sec. (3)
12	Lights On Upon Disarm	ON (L)	OFF (U)		
13	Disarm Upon Trunk Release	ON (L)	OFF (U)		
14	Arming Delay	3 Seconds (L)	15 Seconds (U)	30 Seconds (2)	45 Seconds (3)
15	Steady Siren / Pulsed Horn	Steady Siren (L)	Pulsed Horn Lo (U)	Pulsed Med. (2)	Pulsed Hi (3)
16	Alarm Functions Bypass	OFF (U)	ON (L)		
17	Ignition Anti-Carjacking	OFF (U)	ON (L)		
18	Door Anti-Carjacking	OFF (U)	ON (L)		
19	Remote Anti-Carjacking	OFF (U)	ON (L)		
20	Open Door Warning at Arm	OFF (U)	ON (L)		
21	III Button Operation	3rd Chan. (L)	Panic (U)	4th Chan. (2)	5th Chan. (3)
22	Doorlock Functions	.8 second (L)	3 Seconds (U)	Double Unlock (2)	Total Closure (3)
23	Lock Relay Functions	Lock (L)	Parking Light (U)	Channel 4 Latch (2)	Channel 4 On Demand (3)
24	Unlock Relay Functions	Unlock (L)	Horn, med (U)	Channel 5 Latch (2)	Channel 5 On Demand (3)

installation features

Omega

LIMITED LIFETIME WARRANTY

Products manufactured and sold by OMEGA RESEARCH & DEVELOPMENT, INC. (the Company), are warranted to be free from defects in materials and workmanship under normal use. If a product sold by the Company proves to be defective, the Company will repair or replace it free of charge within the first year and thereafter all parts to be repaired will be free with only a nominal charge for Omega Research and Development, Inc.'s labor and return shipping, to the original owner during the lifetime of the car in which it was originally installed.

All products for warranty repair must be sent postage prepaid to Omega Research & Development, Inc., 981 N Burnt Hickory Rd Douglasville, Ga 30134, with bill of sale or other dated proof of purchase. This warranty is nontransferable and does not apply to any product damaged by accident, physical or electrical misuse or abuse, improper installation, alteration, any use contrary to its intended function, unauthorized service, fire, flood, lightning, or other acts of God.

This warranty limits the Company's liability to the repair or replacement of the product. The Company shall not be responsible for removal and/or reinstallation charges, damage to or theft of the vehicle or its contents, or any incidental or consequential damages caused by any failure or alleged failure of the product to function properly. Under No Circumstances Should This Warranty, Or The Product Covered By It, Be Construed As A Guarantee Or Insurance Policy Against Loss. The Company neither assumes nor authorizes any person or organization to make any Warranties or assume any liability in connection with the sale, installation, or use of this product.

Please treat the 2-Way Controller with care; as with all LCD devices, it is vulnerable to mishandling damage such as impacts or dropping. Such damage, as with scratches, chips and normal "wear and tear", is not a factory defect and is not covered under warranty.

OMEGA
RESEARCH AND DEVELOPMENT, INC.

LME70160

Product Warranty Registration Upgrade

Omega Research and Development, Inc. warrants to the original consumer purchaser that the system control unit and remote control(s) shall be free from any manufacturer's defect for as long as the original consumer purchaser owns the vehicle in which the system was originally installed. Further, that all other parts, components and accessories of the system are warranted to be free from manufacturer defects for the same period of time. Additional terms and conditions are:

- The Warranty Registration must have been submitted in its entirety within ten (10) days of the installation (by Internet) or mailed (postmarked) within ten (10) days of the installation.
- Your Product Serial Number on this form must accompany your complaint and returned items, along with a copy of the original sales receipt. Our records are kept in Serial Number sequence, and by purchaser's name.
- Omega Research and Development will repair or replace, at its option without charge during the warranty period, any component that proves defective in material or workmanship under normal use.
- This warranty is limited to defective components and specifically excludes incidental or consequential damages. Warranty on installation labor, removal and reinstallation are not covered by this warranty.
- This product warranty is not to be construed as an insurance policy against any loss.

**Register your warranty at
www.caralarm.com on the Internet
or**

**by mail, by completing the other side of this card,
detach this half and mail to:**

**Omega Research and Development, Inc.
981 North Burnt Hickory Road, Douglasville, GA, 30134**

(mail this half, and keep the other half with second serial number label)

Mail-in Warranty Registration Form

Serial Number :

PLEASE PRINT CLEARLY

PURCHASER INFORMATION

First Name: _____

Last Name: _____

Street Address

City

State ____/____/____ ZIP / Postal Code ____/____/____ - ____/____/____

____/____/____ - ____/____/____ - ____/____/____ E-Mail:
Phone #

Product Installation
Model: ____/____/____/____/____/____ Date ____/____/-____/____ - ____/____/

Vehicle
Year ____/____/____/____ Make- ____/____/____/____/____/____/____/____/____/____/

Model: ____/____/____/____/____/____/____/____/____/____/____/____/____/____/____/____/

VIN: ____/____/____/____/____/____/____/____/____/____/____/____/____/____/____/____/

DEALER INFORMATION

Dealer Name:

Installer Name:

Dealer Address:

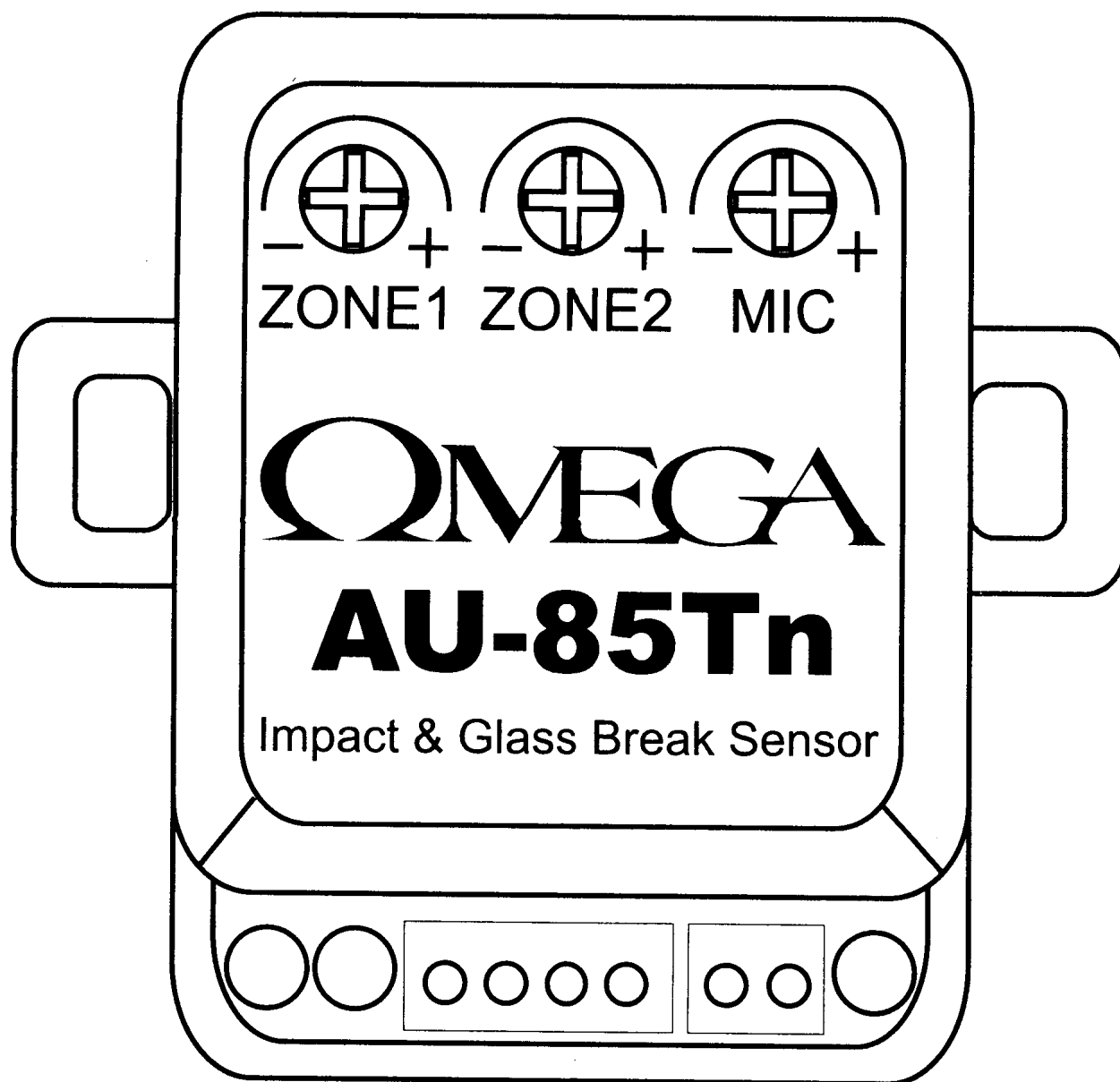
City: State, Zip:

Dealer Phone #:

E-Mail:

FAX #:

AU-85Tn Dual Zone Magnetic Shock & Glass Breakage Sensor



Omega Wiring Harness Coloring Convention
RED = Constant +12v BLACK = Ground When Armed
BLUE = Alarm (Hard) Trigger GREEN = Prewarn Trigger

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AU-85Tn

DUAL ZONE MAGNETIC SHOCK WITH GLASS BREAKAGE SENSOR



- Magnetic field mechanism for precise & reliable performance
- Glass breakage detection microphone
- LED indicators for all three zones
- Direct plug into any Omega alarm

AU-85Tn

DUAL ZONE MAGNETIC SHOCK WITH GLASS BREAKAGE SENSOR

- Magnetic field mechanism for precise & reliable performance
- Glass breakage detection microphone
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AU-85Tn

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This product is protected by one or more of the following patents:

US Patents	6,512,465	7,046,126	7,305,293	5,914,667	701285	2,322,369	5812066
5,612,669	6,512,466	7,061,137	20060276199	5,945,936	Russia:	2,067,099	5815108
5,654,688	6,522,267	7,068,153	20060276762	5,952,933	000298	2,189,821	5898391
5,663,704	6,529,124	7,091,822	D561345	5,990,786	Europe:	2,197,828	5952619
5,729,191	6,587,052	7,149,623	11/158,214	6,028,372	EP0817734	2,500,929	6067051
5,818,329	6,606,561	6,696,927	20070108144	6,028,505	2320248	2,502,885	6067278
5,612,578	6,628,196	6,720,868	58226	6,087,996	0,442,627	1,315,859	6075330
5,739,747	6,676,615	6,737,989	11844648	6,093,979	ep1500565	2,386,427	6127982
5,750,942	6,693,563	6,737,961	4,794,368	6,184,779	ep1538038	2,220,101	6128466
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5,982,277	6,756,886	D385,878	4,897,630	6,452,484	Brazil:	5838255	6133645
5,986,571	6,765,499	D406,107	4,922,224	6,452,483	PI9604820-4	5003287	5412371
6,011,460	6,765,500	D459,314	4,987,402	6,561,151	Korea:	5128650	5771446
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6,049,268	6,771,167	D475,353	5,081,667	6,781,507	303,741	5602535	5224152
6,130,605	6,784,809	D500,118	5,117,217	6,700,479	Japan:	5838255	4538135
6,130,606	6,798,339	D511,198	5,132,660	6,828,901	3,290,440	5412371	4979220
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6,243,004	6,812,829	20030163344	5,349,931	10/789,534	2,218,101	6678892	5905431
6,249,216	6,816,089	20040004537	5,357,560	10/937,139	2,320,248	6765528	111,926
6,275,147	6,819,269	20040049325	5,506,568	11/079,468	2,415,023	6899365	0,442,627
6,297,731	6,827,642	20040135702	5,467,070	11/110,135	2,420,947	6928654	HK 1023432
6,320,514	6,828,694	7,369,936	5,534,845	11/110,136	2,454,089	6961239	69,102,879
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6,346,877	6,879,248	20040017284	5,646,591	11/600,367	2,414,991	7050124	2,223,583
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6,480,095	6,972,667	20060129284	5,783,988	6462648	2,238,037	7219942	
6,480,098	7,005,960	20060129282	5,783,989	6697719	2,365,887	7243007	
6,480,117	7,010,402	7,343,244	5,798,711	7142097	2,113,221	7245274	
6,498,300	7,015,830	20050156719	5,872,519	Foreign	2,316,641	4738420	
6,507,786	7,031,826	7,312,696	5,900,806	Patents	2,105,426	4801944	
6,509,868	7,031,835	20050156716	5,907,195	Australia:	2,246,158	5808584	